



DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

Certified Mail No.

Activity No.: PER19960009

Agency Interest No. 2083

Sarah Thigpen
Responsible Care Leader
Union Carbide Corporation
Taft / Star Manufacturing Complex
P. O. Box 50
Hahnville, LA 70057

RE: Part 70 Operating Permit, Union Carbide Corp - Taft Star Plant, Union Carbide Corp, Taft, St. Charles Parish, Louisiana

Dear Ms Thigpen:

This is to inform you that the permit for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 Operating Permit. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the _____ of _____, 2011, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and Agency Interest No. cited above should be referenced in future correspondence regarding this facility.

Done this _____ day of _____, 2006.

*CCB/LND
cc: EPA Region VI*

CCB/LND
cc: EPA Region VI

ENVIRONMENTAL SERVICES

: PO BOX 4313, BATON ROUGE, LA 70821-4313

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AIR PERMIT BRIEFING SHEET
PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Union Carbide Corp - Taft Star Plant

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Union Carbide Corp, Oxide II Unit

Taft, St. Charles Parish, Louisiana

I. Background

Union Carbide Corporation (UCC), a subsidiary of the Dow Chemical Company, operates Taft/Star Manufacturing Complex's Oxide II Unit, an existing chemical manufacturing facility that began operation prior to 1969. The Unit is currently operating under State Permit 476C (M3) issued January 8, 2001.

This is the initial Part 70 operating permit for the Oxide II Unit.

II. Origin

A permit application and Emission Inventory Questionnaire was submitted by UCC on October 12, 1996 requesting a Part 70 operating permit. A revised application dated December 31, 2002 as well as additional information dated October 19, 24, November 18, 2005, January 16, 30, and 31, 2006 was also received.

III. Description

Ethylene oxide is produced in the Oxide II Unit at Union Carbide Taft/Star Manufacturing Complex by reacting ethylene and oxygen over a catalyst. The oxygen needed for reaction enters the system with the air that is supplied via a gas turbine. Nitrogen is used as a ballast gas. Carbon dioxide, a byproduct of the reaction, is removed from the process through a Blowoff Oxidation Unit (BOU) and then out the waste heat boiler exhaust. The BOU contains catalyst that burns trace hydrocarbons leaving the system with the CO₂. The ethylene oxide is scrubbed from the system using water.

The oxide is then stripped from the water and sent to a series of stills where the ethylene oxide is concentrated and purified. Some of the purified ethylene oxide is sent directly to storage tanks to either be shipped as product or used by other facilities within the Taft Plant. The remainder of the ethylene oxide is reacted with water to produce ethylene glycol. The excess water from the glycol system is recovered via a series of evaporators and returned to the process. The monoethylene glycol is separated from the heavier glycols in a distillation column.

Union Carbide proposes the following changes:

- Operation flexibility for the storage tanks. The tanks are in dedicated service and will each be permitted to store the entire yearly throughput for that specific service to allow

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for tank maintenance, etc. This will result in a slight overestimation of VOC emissions from the tanks.

- Material composition updates for Emission Points 57A, 60C, 60E, 60G, 196J, and 2300.
- Emission changes for Emission Point 50. These are due to changes in AP-42 emission factors and improved speciation of TAPs.
- Increase in hours of operation from the Tetralin Heater, Emission Point 58A, from 576 hrs/yr to 864 hrs/yr. The heater is used for start-up of Oxide 2, and additional time is requested to operate this equipment.
- Include permitted Emission Points 51, 52, 57A, and 60B under General Condition XVII.
- Include a system pressure vent, Emission Point 2301, as a new source under General Condition XVII.
- Increase in hours of operation from 13 to 23 hrs/yr, for Emission Point 2300, and also revision of its maximum hourly rate.
- Include permitted Emission Point 50A as an insignificant activity .
- Addition of ORS Vacuum Jet as a SOCMI HON Group 2 vent.
- Removal of SOCMI HON regulations from the Tetralin Surge Tank and Tetralin Collection Pot, Emission Points 58 and 58B

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	11.3	10.22	-1.08
SO ₂	0.87	4.96	+4.09
NO _x	470	476.91	+6.91
CO	144	170.07	+26.07
VOC	96.8	89.48	-7.32
Hydrogen Chloride	0.10	0.10	-

VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Acetaldehyde	0.34	0.23	-0.11
Acrolein	0.02	<0.01	-0.02
Diethylene Ether (P-Dioxane)	0.01	0.01	-
Ethyl Chloride (Chloroethane)	-	0.17	+0.17
Ethylene Dichloride (1,2 dichloroethane)	0.22	0.38	+0.16
Ethylene Glycol	4.0	6.12	+2.12

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VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Ethylene Oxide	3.2	3.81	+0.61
Formaldehyde	0.001	<0.01	-
Naphthalene	0.16	0.85	+0.69
Vinyl Chloride	-	0.17	+0.17
Total	7.951	+11.94	+3.99

Besides the increases in hours of operation for the Tetralin Heater and Evaporator Vent, Emission Points 58A and 2300, increases in emissions are due to reconciliation for changes in emission factors and to correct a mathematical error in the original permit. Increases in VOC TAPs are due to improved speciation of VOCs.

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IV. Type of Review

This permit was reviewed for compliance with 40 CFR Part 70, the Louisiana Air Quality Regulations, New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant Deterioration is not required.

This facility is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51. TAPs emitted from sources in the Oxide II Unit include Ethylene Oxide, Formaldehyde and Vinyl Chloride (Class I), Acetaldehyde, Acrolein, Diethylene Ether, Ethyl Chloride, Ethylene Dichloride, and Naphthalene (Class II), Hydrogen Chloride and Ethylene Glycol (Class III).

V. Credible Evidence

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

VI. Public Notice

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on MONTH DAY, 2006, and in the *St. Charles Herald-Guide*, Boutte, on MONTH DAY, 2006, and submitted to the St. Charles Parish Library Hahnville Branch on MONTH DAY, 2006. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on MONTH DAY 2006. The draft permit was also submitted to US EPA Region VI on MONTH DAY, 2006. No comments were received.

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VII. Effects on Ambient Air

Dispersion Model(s) Used: ISCST3

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Air Quality Standard (NAAQS)
Ethylene Oxide	Annual Avg.	0.66 µg/m ³	1.00 µg/m ³
Vinyl Chloride	Annual Avg.	0.017	1.19 µg/m ³

VIII. General Condition XVII Activities

Work Activity	Schedule	Emission Rates - tons				
		PM ₁₀	SO ₂	NO _x	CO	VOC
Sample Collection	2,700/yr	-	-	-	-	0.02
Filter Changes	240/yr	-	-	-	-	<0.01
Catalyst Changes	4/yr	<0.01	-	-	-	-
Reaction System Purging with Nitrogen (Maintenance) (51, 52 & 2301 stacks)	12 events/yr total (1 hr each)	-	-	-	-	0.24
Stripping Still & Hogging Jet Vent Purging (Maintenance) (60B stack)	12 events/yr total	-	-	-	-	<0.01
Evaporator Vent Condenser and PC Tails Stripper Vent Purging (Maintenance) (57A Stack)	12 events/yr total	-	-	-	-	0.03

IX. Insignificant Activities

ID No.:	Description	Citation
206	Lab Hood # 1	Insignificant Activity per LAC 33:III.501.B.5.A.6
207	Lab Hood # 7	Insignificant Activity per LAC 33:III.501.B.5.A.6
213	Lab Hood # 2	Insignificant Activity per LAC 33:III.501.B.5.A.6
214	Lab Hoods # 3 and # 12	Insignificant Activity per LAC 33:III.501.B.5.A.6

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215	Lab Hood # 5	Insignificant Activity per LAC 33:III.501.B.5.A.6
215A	Lab Hood # 4	Insignificant Activity per LAC 33:III.501.B.5.A.6
215B	Lab Hood # 10	Insignificant Activity per LAC 33:III.501.B.5.A.6
216	Lab Hood # 6	Insignificant Activity per LAC 33:III.501.B.5.A.6
217	Lab Hoods # 8 and # 9	Insignificant Activity per LAC 33:III.501.B.5.A.6
50A	Lubricating Oil Reservoir 2,250 gallons	Insignificant Activity per LAC 33:III.501.B.5.A.3

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**Union Carbide Corp, Oxide II Unit
Taft, St. Charles Parish, Louisiana**

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60 NSPS						40 CFR 61						40 CFR 63 NESHAP						40 CFR									
		A	Dc	GG	Kb	VV	NN	R	RR	A	M	FF	A	F	G	H	H	52	68	70	80	82							
UCC	Facility Wide	1								1	1	1										1	1	1	1	1	1		
GRP 49	Oxide II Unit																	1	1	1	1	1							
EQT465	41A-Tank 3358																						1						
EQT466	42A-Tank 3360																						1						
EQT467	43A Tank 3357																						3						
EQT468	44A Tank 3359																						3						
EQT469	46A Tank 3361																						1						
EQT472	50 Waste Heat Boiler																												
RLP18	51-Fresh Converter Blowdown Vent																						2						
RLP19	52-Blowoff Blowdown Vent																						2						
RLP20	53 H-808 Vent																						1						
RLP21	54 H-807 Vent																						1						
RLP22	55 H-1005 Vent																						1						
RLP23	56 H-1021 Vent																						1						
RLP24	57 H-835 Vent																						1						
EQT470	58 Tank C-301																						3						
EQT474	58A Tetralin Heater																												
EQT471	58B Tank C-317																						1						
RLP27	60C Cell Vent No. 2																						3						
EQT475	60E Oxide Flare (10")																												
EQT312	60F Evaporator (3")																												

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Activity No.: 1996009

Union Carbide Corp, Oxide II Unit
Taft, St. Charles Parish, Louisiana

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	40 CFR 60 NSPS						40 CFR 61						40 CFR 63 NESHAP						40 CFR						
		A	Dc	GG	Kb	VV	NN	R	RR	A	M	FF	A	F	G	H	52	68	70	82						
RLP28	60G Fast Purge Header No. 2															3										
RLP29	60H Jet Condensate Pot															1										
FUG9	196J Fugitive Emissions					3										1		1								
RLP30	2300 Evaporator Vent					3										3										
RLP31	2301 System Pressure Vent															2										
EQT477	Tank C-111					2										2										

KEY TO MATRIX

- 1 - The regulations have applicable requirements that apply to this particular emission source.
-The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 -The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 - The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank – The regulations clearly do not apply to this type of emission source.

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Union Carbide Corp, Oxide II Unit
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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	LAC 33:III Chapter																	
		5'	9	11	13	1503	1513	2103	2111	2113	2115	2116	2121	2122	2147	51*	53.	56	59
UCC	Facility Wide															1	1	1	
GRP 49	Oxide II Unit																		
EQT465	41A-Tank 3358																1		
EQT466	42A-Tank 3360																1		
EQT467	43A Tank 3357																3		
EQT468	44A Tank 3359																3		
EQT469	46A Tank 3361																1		
EQT472	50 Waste Heat Boiler																1		
RLP18	51-Fresh Converter Blowdown Vent																1		
RLP19	52-Blowoff Blowdown Vent																1		
RLP20	53 H-808 Vent																3	1	
RLP21	54 H-807 Vent																3	1	
RLP22	55 H-1005 Vent																3	1	
RLP23	56 H-1021 Vent																3	1	
RLP24	57 H-835 Vent																3	1	
EQT470	58 Tank C-301																1		
EQT474	58A Tetratin Heater																2		
EQT471	58B Tank C-317																1		
RLP27	60C Cell Vent No. 2																1		
EQT475	60E Oxide Flare (10")																1		

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Taft, St. Charles Parish, Louisiana**

X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	LAC 33:III.Chapter																
		5 ¹	9	11	13	1503	1513	2103	2111	2113	2115	2116	2121	2122	2147	51*	53	56
EQT312	60F Evaporator (3")		1		2							1					1	
RLP28	60G Fast Purge Header No. 2											2					1	
RLP29	60H Jet Condensate Pot											2					1	
FUG9	196J-Fugitive Emissions								1				1				1	
RLP30	2300 Evaporator Vent											2				3	1	
RLP31	2301 System Pressure Vent															1		
EQT477	Tank C-111								1								1	

* The regulation indicated above is a State Only regulation.

¹ LAC 33:III.C.6 citations are federally enforceable except when it specifically states that the regulation is State Only.

KEY TO MATRIX

- 1** -The regulations have applicable requirements that apply to this particular emission source.
-The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2** -The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3** -The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank – The regulations clearly do not apply to this type of emission source.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT465 41A-Tank 3358 EQT466 42A-Tank 3360 EQT469 46A-Tank 3361	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b-117b]	DOES NOT APPLY. Storage tanks have not been constructed, reconstructed or modified since July 23, 1984.
	Storage of VOC [LAC 33:III.2103]	DOES NOT APPLY. Tanks store VOCs with vapor pressure less than 1.5 psia.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT467 43A-Tank 3357 EQT468 44A-Tank 3359	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b-117b]	DOES NOT APPLY. Storage tanks have not been constructed, reconstructed or modified since July 23, 1984.
	NESHAP Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater. [40 CFR 63.119-123]	DOES NOT APPLY. Tanks do not store HAPs and do not meet the definition of a storage vessel per 40 CFR 63.101.
	Storage of VOC [LAC 33:III.2103]	DOES NOT APPLY. Tanks store VOCs with vapor pressure less than 1.5 psia.
	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.5109]	DOES NOT APPLY. Tanks do not emit TAPs.

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ID No:	Requirement	Notes
EQT619 IGT-Industrial Gas Turbines	NSPS Subpart GG - Standards of Performance for Stationary Gas Turbines. [40 CFR 60.330-335]	DOES NOT APPLY as per 40 CFR 60.330(b). Turbine has not been constructed, reconstructed, or modified since October 2, 1977.
	NESHAP 63 Subpart YYYYY Stationary Combustion Turbines. [40 CFR 63.6080 – 63.6175]	DOES NOT APPLY as per 40 CFR 63.6090(b)(4). Existing stationary combustion turbine. Commenced construction or reconstruction on or before January 14, 2003.
	Emission Standards for Sulfur Dioxide: Emission Limitations. LAC 33:III. 1503.C	Exempt . Unit emits less than 250 TPY of SO2.
EQT472 50-Waste Heat Boiler (F-603 Vent)	NESHAP 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters Other Requirements and Information [40 CFR 63.7480-63.7575]	DOES NOT APPLY. Applies to Industrial Boilers. Waste Heat Boilers are excluded from this definition as per 40 CFR 63.7575.
	NSPS 60 Subpart Db - Standards of Performance for Small-Industrial-Commercial-Institutional Steam Generating Units. [40 CFR 60.40b- 60.49b]	DOES NOT APPLY. Source has not been constructed, reconstructed after June 19, 1984. Also, the waste heat boiler does not combust fuel. It is a heat recovery device for the IGT and uses the exhaust gas to produce steam.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
RLP18 51-Fresh Converter Blowdown vent	NSPS Subpart RRR – Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes. [40 CFR 60.700-708]	DOES NOT APPLY. This unit has not undergone modification or reconstruction after June 29, 1990.
RLP19 52-Blowoff Converter Blowdown Vent	NESHAP Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater. [40 CFR 63.110 - 118]	DOES NOT APPLY. Does not meet the definition of a process vent per 40 CFR 63.101 because sources do not originate as a continuous flow per 63.107(b). These sources vent only approximately 12 hrs/yr.
RLP31 2301-System Pressure Vent		

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
RLP20 53-Mono Glycol column Steam Jet (H-808 Vent)	NSPS Subpart NNN – Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations. [40 CFR 60.660-668]	DOES NOT APPLY. This unit has not undergone modification or reconstruction starting on or after December 30, 1983.
RLP21 54-Final Concentrator Column Steam Jet (H-807 Vent)		
RLP22 55-Diglycol Forecolumn Steam Jet (H-1105 Vent)	Control of Emission of Organic Compounds: Waste Gas Disposal [LAC 33:III.2115.H(c)]	EXEMPT. Waste gas stream has combined weight of VOCs less than 100 lbs in any continuous 24 hr. period. Keep records to show compliance with exemption.
RLP23 56-Diglycol Column Steam Jet (H-1021 Vent)		
RLP24 57-Preconcentrator Steam Jet (H-835 Vent)		

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT470 58-Tank C-301 Tetralin Surge Tank	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b-117b]	DOES NOT APPLY. Storage tanks have not been constructed, reconstructed or modified since July 23, 1984.
	NESHAP Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater. [40 CFR 63.119]	DOES NOT APPLY. Tanks do not meet the definition of a storage vessel per 40 CFR 63.101. Tank is a surge control vessel.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT474 58A-Tetralin Heater (R-305 Vent)	NSPS - Subpart Dc - Standards of Performance for Small-Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60.40c-48c]	DOES NOT APPLY. Applies to steam generating units with heat input > 10 MMBtu/hr but < 100 MMBtu/hr that commenced construction, reconstruction or modification after June 9, 1989. Source has not been constructed/modified/reconstructed after June 9, 1989.
	Emission Standards for Sulfur Dioxide: Emission Limitations [LAC 33:III.1503.C]	EXEMPT. Source emits less than 250 TPY sulfur compounds (as SO ₂). Maintain records and calculations for annual sulfur dioxide emissions to ensure emissions are below the limit that allows for control and monitoring exemptions.
	Emission Standards for Sulfur Dioxide: Continuous Emission Monitoring. [LAC 33:III.1511.A]	DOES NOT APPLY. Continuous monitoring of sulfur dioxide emission not required for sources emitting < 100 TPY of sulfur dioxide into the atmosphere.
	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.5109]	EXEMPT as per LAC 33:III 5105.B. Emissions are from combustion of Group 1 virgin fossil fuels.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT471 58B-Tetralin Collection Pot (C-317 vent)	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b-117b]	DOES NOT APPLY. Storage tank has not been constructed, reconstructed or modified since July 23, 1984.
RLP29 60H-Jet Condensable Pot (C823 Vent)	Control of Emission of Organic Compounds: Waste Gas Disposal [LAC 33:III.2103]	DOES NOT APPLY. Tanks store VOCs with vapor pressure less than 1.5 psia.
RLP27 60C-Analyzer Cell Vent No.2	Control of Emission of Organic Compounds: Waste Gas Disposal [LAC 33:III.2115.H(c)]	EXEMPT. Waste gas stream has combined weight of VOCs less than 100 lbs in any continuous 24 hr. period. Keep records to show compliance with exemption.
RLP28 60G-Fast Purge & Analyzer Header Vent No. 2	NESHAP Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater. [40 CFR 63.110 - 118]	DOES NOT APPLY. Does not meet the definition of a process vent per 40 CFR 63.101 and 40 CFR 63.107(h)(9). The gas stream from these sources exists an analyzer per 63.107(h)(9) and therefore is not applicable to SOCMI HON regulations.
	Control of Emission of Organic Compounds: Waste Gas Disposal [LAC 33:III.2115.H(c)]	EXEMPT. Waste gas stream has combined weight of VOCs less than 100 lbs in any continuous 24 hr. period. Keep records to show compliance with exemption.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT475 60E-Oxide Flare 10" (F-460-10 Vent)	Emission Standards for Sulfur Dioxide: Emission Limitations [LAC 33:III.1503.C]	EXEMPT. Each source emits less than 250 TPY sulfur compounds (as SO ₂). Maintain records and calculations for annual sulfur dioxide emissions to ensure emissions are below the limit that allows for control and monitoring exemptions.
EQT475 60F-Evaporator Vents 3" (F-460-3 Vent)		
FUG 09 196J - Fugitives	NSPS Subpart VV – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. [40 CFR 60.480]	DOES NOT APPLY. Unit constructed prior to January 5, 1981.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
RLP30 2300-Evaporator Vent (PICA-724.9)	NSPS Subpart NNN – Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations. [40 CFR 60.660-668)]	DOES NOT APPLY. This unit has not undergone modification or reconstruction starting on or after December 30, 1983.
	NESHAP Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater. [40 CFR 63.110 - 118]	DOES NOT APPLY. Does not meet the definition of a process vent as per 40 CFR 63.107(h)(5).
	Control of Emission of Organic Compounds: Waste Gas Disposal [LAC 33:III.2115.H(c)]	EXEMPT. Waste gas stream has VOC concentration less than 30,000 ppm and is exempt as per LAC 33:III.2115.H.1.d. Keep records to show compliance with exemption.
RLP37 B3 Scrubber Vent (Recovery Device)	Control of Emission of Organic Compounds: Waste Gas Disposal [LAC 33:III.2115.H(c)]	DOES NOT APPLY. Subject to more stringent standard (control requirements of the HON).

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT477 Tank C-111 (EDC)	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b-117b]	DOES NOT APPLY. Storage tank has not been constructed, reconstructed or modified since July 23, 1984. Also, tank capacity less than 1,500 gals.
	NESHAP Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater. [40 CFR 63.110 - 118]	DOES NOT APPLY. Does not meet the definition of a storage vessel per 40 CFR 63.101 Tank is less than 10,000 gals.
EQT623 B1-B3 Oxide 2 Reaction System Reactors EQT624 PCT-1 PC Tails Reactors EQT625 RX1-RX2 Glycol Reactors	NSPS Subpart RRR – Standards of Performance for VOC Emissions from SOCMI Reactor processes [40 CFR 60.660- 60.668]	DOES NOT APPLY. Applies to facilities which were constructed, modified, or reconstructed after June 29, 1990. This unit was not constructed, reconstructed or modified after June 29, 1990.

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Taft, St. Charles Parish, Louisiana

XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
EQT626 C1-C3 Oxide 2 Refining Distillation Unit	NSPS Subpart NNN – Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations. [40 CFR 60.660-668]	DOES NOT APPLY. This unit has not undergone modification or reconstruction starting on or after December 30, 1983.

The above table provides explanation for both the exemption status or non-applicability of a source cited by 1, 2 or 3 in the matrix presented in Section X (Table 1) of this permit.

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- A. The term of this permit shall be five (5) years from date of issuance. An application for a renewal of this 40 CFR Part 70 permit shall be submitted to the administrative authority no later than six months prior to the permit expiration date. Should a complete permit application not be submitted six months prior to the permit expiration date, a facility's right to operate is terminated pursuant to 40 CFR Section 70.7(c)(ii). Operation may continue under the conditions of this permit during the period of the review of the application for renewal. [LAC 33:III.507.E.1, E.3, E.4, reference 40 CFR 70.6(a)(2)]
- B. The conditions of this permit are severable; and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [Reference 40 CFR 70.6(a)(5)]
- C. Permittee shall comply with all conditions of the 40 CFR Part 70 permit. Any permit noncompliance constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [LAC 33:III.507.B.2, reference 40 CFR 70.6(a)(6)(i) & (iii)]
- D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Reference 40 CFR 70.6(a)(6)(ii)]
- E. This permit does not convey any property rights of any sort, or an exclusive privilege. [Reference 40 CFR 70.6(a)(6)(iv)]
- F. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. A claim of confidentiality does not relieve the permittee of the requirement to provide the information. [LAC 33:III.507.B.2, 517.F, reference 40 CFR 70.6(a)(6)(v)]
- G. Permittee shall pay fees in accordance with LAC 33:III.Chapter 2 and 40 CFR Section 70.6(a)(7). [LAC 33:III.501.C.2, reference 40 CFR 70.6(a)(7)]

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- H. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the permitting authority or authorized representative to perform the following:
1. enter upon the permittee's premises where a 40 CFR Part 70 source is located or emission-related activity is conducted, or where records must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(i)];
 2. have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(ii)];
 3. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iii)]; and
 4. as authorized by the Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [LAC 33:III.507.H.2, reference 40 CFR 70.6(c)(2)(iv)]
- I. All required monitoring data and supporting information shall be kept available for inspection at the facility or alternate location approved by the agency for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and all reports required by the permit.
[Reference 40 CFR 70.6(a)(3)(ii)(B)]
- J. Records of required monitoring shall include the following:
1. the date, place as defined in the permit, and time of sampling or measurements;
 2. the date(s) analyses were performed;
 3. the company or entity that performed the analyses;
 4. the analytical techniques or methods used;
 5. the results of such analyses; and
 6. the operating conditions as existing at the time of sampling or measurement.
- [Reference 40 CFR 70.6(a)(3)(ii)(A)]
- K. Permittee shall submit at least semiannually, reports of any required monitoring, clearly identifying all instances of deviations from permitted monitoring requirements, certified by a responsible company official. For previously reported deviations, in lieu of attaching the individual deviation reports, the semiannual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The semiannual reports shall be submitted to the Office of Environmental Compliance, Surveillance Division by March 31 for the preceding period encompassing July through December and September 30 for the preceding period encompassing January through June. Any quarterly deviation report required to be submitted by March 31 or September 30 in accordance with Part 70 General Condition R may be consolidated with the semiannual reports required by this general condition as long as the report clearly indicates this and all

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required information is included and clearly delineated in the consolidated report. [LAC 33:III.507.H, reference 40 CFR 70.6(a)(3)(iii)(A)]

- L. The permittee shall submit at least semiannual reports on the status of compliance pursuant to 40 CFR Section 70.5 (c) (8) and a progress report on any applicable schedule of compliance pursuant to 40 CFR Section 70.6 (c) (4). [LAC 33:III.507.H.1, reference 40 CFR 70.6(c)(4)]
- M. Compliance certifications per LAC 33:III.507.H.5 shall be submitted to the Administrator as well as the permitting authority. For previously reported compliance deviations, in lieu of attaching the individual deviation reports, the annual report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The compliance certifications shall be submitted to the Office of Environmental Compliance, Surveillance Division by March 31 for the preceding calendar year. [LAC 33:III.507.H.5, reference 40 CFR 70.6(c)(5)(iv)]
- N. If the permittee seeks to reserve a claim of an affirmative defense as provided in LAC 33:III.507.J.2, the permittee shall, in addition to any emergency or upset provisions in any applicable regulation, notify the permitting authority within 2 working days of the time when emission limitations were exceeded due to the occurrence of an upset. In the event of an upset, as defined under LAC 33:III.507.J, which results in excess emissions, the permittee shall demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an emergency occurred and the cause was identified; 2) the permitted facility was being operated properly at the time; and 3) during the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standard or requirement of the permit. [LAC 33:III.507.J.2, reference 40 CFR 70.6(g)(3)(iv) & (i-iii)]
- O. Permittee shall maintain emissions at a level less than or equal to that provided for under the allowances that the 40 CFR Part 70 source lawfully holds under Title IV of the Clean Air Act or the regulations promulgated thereunder. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act. [Reference 40 CFR 70.6(a)(4)]
- P. Any permit issued pursuant to 40 CFR Part 70 may be subject to reopening prior to the expiration of the permit for any of the conditions specified in 40 CFR Section 70.7(f) or LAC 33:III.529. [LAC 33:III.529.A-B, reference 40 CFR 70.7(f)]
- Q. Permittee may request an administrative amendment to the permit to incorporate test results from compliance testing if the following criteria are met:
 1. the changes are a result of tests performed upon start-up of newly constructed, installed, or modified equipment or operations;

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2. increases in permitted emissions will not exceed five tons per year for any regulated pollutant;
 3. increases in permitted emissions of Louisiana toxic air pollutants or of federal hazardous air pollutants would not constitute a modification under LAC 33:III. Chapter 51 or under Section 112 (g) of the Clean Air Act;
 4. changes in emissions would not require new source review for prevention of significant deterioration or nonattainment and would not trigger the applicability of any federally applicable requirement;
 5. changes in emissions would not qualify as a significant modification; and
 6. the request is submitted no later than 12 months after commencing operation. [LAC 33:III.523.A, reference 40 CFR 70.7(d)]
- R. Permittee shall submit prompt reports of all permit deviations as specified below to the Office of Environmental Compliance, Surveillance Division. All such reports shall be certified by a responsible official in accordance with 40 CFR 70.5(d).
1. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.
 2. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.
 3. A written report shall be submitted quarterly to address all permit deviations not included in paragraphs 1 or 2 above. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. The quarterly deviation reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by Part 70 General Condition K as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. For previously reported permit deviations, in lieu of attaching the individual deviation reports, the quarterly report may clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any permit deviations occurring during the corresponding specified calendar quarter:
 - a. Report by June 30 to cover January through March
 - b. Report by September 30 to cover April through June
 - c. Report by December 31 to cover July through September
 - d. Report by March 31 to cover October through December
 4. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided such reports are certified in accordance with 40 CFR 70.5(d) and contain all

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information relevant to the permit deviation. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107. [Reference 40 CFR 70.6(a)(3)(iii)(B)]

S. Permittee shall continue to comply with applicable requirements on a timely basis, and will meet on a timely basis applicable requirements that become effective during the permit term. [Reference 40 CFR 70.5(c)(8)(iii)]

T. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156;
2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158;
3. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161;
4. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR 82.166. ("MVAC-like appliance" as defined at 40 CFR 82.152);
5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156; and
6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166. [Reference 40 CFR 82, Subpart F]

U. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant. [Reference 40 CFR 82, Subpart B]

V. Data availability for continuous monitoring or monitoring to collect data at specific intervals: Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall

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conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emissions unit is operating. For purposes of reporting monitoring deviations under Part 70 General Conditions K and R, and unless otherwise provided for in the Specific Requirements (or Table 3) of this permit, the minimum degree of data availability shall be at least 90% (based on a monthly average) of the operating time of the emissions unit or activity being monitored. This condition does not apply to Leak Detection and Repair (LDAR) programs for fugitive emissions (e.g., 40 CFR 60 Subpart VV, 40 CFR 63 Subpart H).

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

- I. This permit is issued on the basis of the emissions reported in the application for approval of emissions and in no way guarantees that the design scheme presented will be capable of controlling the emissions to the type and quantities stated. Failure to install, properly operate and/or maintain all proposed control measures and/or equipment as specified in the application and supplemental information shall be considered a violation of the permit and LAC 33:III.501. If the emissions are determined to be greater than those allowed by the permit (e.g. during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted. All terms and conditions of this permit shall remain in effect unless and until revised by the permitting authority.
- II. The permittee is subject to all applicable provisions of the Louisiana Air Quality Regulations. Violation of the terms and conditions of the permit constitutes a violation of these regulations.
- III. The Emission Rates for Criteria Pollutants, Emission Rates for TAP/HAP & Other Pollutants, and Specific Requirements sections or, where included, Emission Inventory Questionnaire sheets establish the emission limitations and are a part of the permit. Any operating limitations are noted in the Specific Requirements or, where included, Tables 2 and 3 of the permit. The synopsis is based on the application and Emission Inventory Questionnaire dated October 12, 1996 requesting a Part 70 operating permit. A revised application dated December 31, 2002 as well as additional information dated October 19, 24, November 18, 2005, and January 16, 30, and 31, 2006 was also received.
- IV. This permit shall become invalid, for the sources not constructed, if:
 - A. Construction is not commenced, or binding agreements or contractual obligations to undertake a program of construction of the project are not entered into, within two (2) years (18 months for PSD permits) after issuance of this permit, or;
 - B. If construction is discontinued for a period of two (2) years (18 months for PSD permits) or more.The administrative authority may extend this time period upon a satisfactory showing that an extension is justified.

This provision does not apply to the time period between construction of the approved phases of a phased construction project. However, each phase must commence construction within two (2) years (18 months for PSD permits) of its projected and approved commencement date.
- V. The permittee shall submit semiannual reports of progress outlining the status of construction, noting any design changes, modifications or alterations in the construction schedule which have or may have an effect on the emission rates or ambient air quality levels. These reports shall continue to be submitted until such time as construction is certified as being complete. Furthermore, for any significant change in the design, prior approval shall be obtained from the Office of Environmental Services, Air Permits Division.

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

- VI. The permittee shall notify the Department of Environmental Quality, Office of Environmental Services, Air Permits Division within ten (10) calendar days from the date that construction is certified as complete and the estimated date of start-up of operation. The appropriate Regional Office shall also be so notified within the same time frame.
- VII. Any emissions testing performed for purposes of demonstrating compliance with the limitations set forth in paragraph III shall be conducted in accordance with the methods described in the Specific Conditions and, where included, Tables 1, 2, 3, 4, and 5 of this permit. Any deviation from or modification of the methods used for testing shall have prior approval from the Office of Environmental Assessment, Air Quality Assessment Division.
- VIII. The emission testing described in paragraph VII above, or established in the specific conditions of this permit, shall be conducted within sixty (60) days after achieving normal production rate or after the end of the shakedown period, but in no event later than 180 days after initial start-up (or restart-up after modification). The Office of Environmental Assessment, Air Quality Assessment Division shall be notified at least (30) days prior to testing and shall be given the opportunity to conduct a pretest meeting and observe the emission testing. The test results shall be submitted to the Air Quality Assessment Division within sixty (60) days after the complete testing. As required by LAC 33:III.913, the permittee shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
- IX. The permittee shall, within 180 days after start-up and shakedown of each project or unit, report to the Office of Environmental Compliance, Surveillance Division any significant difference in operating emission rates as compared to those limitations specified in paragraph III. This report shall also include, but not be limited to, malfunctions and upsets. A permit modification shall be submitted, if necessary, as required in Condition 1.
- X. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of at least five (5) years.
- XI. If for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in this permit, the permittee shall provide the Office of Environmental Compliance, Surveillance Division with a written report as specified below.
 - A. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.
 - B. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.
 - C. A written report shall be submitted quarterly to address all emission limitation exceedances not included in paragraphs A or B above. The schedule for submittal of

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

quarterly reports shall be no later than the dates specified below for any emission limitation exceedances occurring during the corresponding specified calendar quarter:

1. Report by June 30 to cover January through March
2. Report by September 30 to cover April through June
3. Report by December 31 to cover July through September
4. Report by March 31 to cover October through December

- D. Each report submitted in accordance with this condition shall contain the following information:
1. Description of noncomplying emission(s);
 2. Cause of noncompliance;
 3. Anticipated time the noncompliance is expected to continue, or if corrected, the duration of the period of noncompliance;
 4. Steps taken by the permittee to reduce and eliminate the noncomplying emissions; and
 5. Steps taken by the permittee to prevent recurrences of the noncomplying emissions.
- E. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided all information specified above is included. For Part 70 sources, reports submitted in accordance with Part 70 General Condition R shall serve to meet the requirements of this condition provided all specified information is included. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107.

XII. Permittee shall allow the authorized officers and employees of the Department of Environmental Quality, at all reasonable times and upon presentation of identification, to:

- A. Enter upon the permittee's premises where regulated facilities are located, regulated activities are conducted or where records required under this permit are kept;
- B. Have access to and copy any records that are required to be kept under the terms and conditions of this permit, the Louisiana Air Quality Regulations, or the Act;
- C. Inspect any facilities, equipment (including monitoring methods and an operation and maintenance inspection), or operations regulated under this permit; and
- D. Sample or monitor, for the purpose of assuring compliance with this permit or as otherwise authorized by the Act or regulations adopted thereunder, any substances or parameters at any location.

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- XIII. If samples are taken under Section XII.D. above, the officer or employee obtaining such samples shall give the owner, operator or agent in charge a receipt describing the sample obtained. If requested prior to leaving the premises, a portion of each sample equal in volume or weight to the portion retained shall be given to the owner, operator or agent in charge. If an analysis is made of such samples, a copy of the analysis shall be furnished promptly to the owner, operator or agency in charge.
- XIV. The permittee shall allow authorized officers and employees of the Department of Environmental Quality, upon presentation of identification, to enter upon the permittee's premises to investigate potential or alleged violations of the Act or the rules and regulations adopted thereunder. In such investigations, the permittee shall be notified at the time entrance is requested of the nature of the suspected violation. Inspections under this subsection shall be limited to the aspects of alleged violations. However, this shall not in any way preclude prosecution of all violations found.
- XV. The permittee shall comply with the reporting requirements specified under LAC 33:III.919 as well as notification requirements specified under LAC 33:III.927.
- XVI. In the event of any change in ownership of the source described in this permit, the permittee and the succeeding owner shall notify the Office of Environmental Services, Air Permits Division, within ninety (90) days after the event, to amend this permit.
- XVII. Very small emissions to the air resulting from routine operations, that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility and approved by the Air Permits Division are considered authorized discharges. Approved activities are noted in the General Condition XVII Activities List of this permit. To be approved as an authorized discharge, these very small releases must:
1. Generally be less than 5 TPY
 2. Be less than the minimum emission rate (MER)
 3. Be scheduled daily, weekly, monthly, etc., or
 4. Be necessary prior to plant startup or after shutdown [line or compressor pressuring/depressuring for example]
- These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. This general condition does not authorize the maintenance of a nuisance, or a danger to public health and safety. The permitted facility must comply with all applicable requirements, including release reporting under LAC 33:I.3901.
- XVIII. Provisions of this permit may be appealed in writing pursuant to La. R.S. 30:2024(A) within 30 days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the secretary or the assistant secretary elects to suspend other provisions as well. Construction cannot proceed except as specifically approved by the secretary or assistant secretary. A request for hearing must be sent to the following:

Attention: Office of the Secretary, Legal Services Division

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

La. Dept. of Environmental Quality
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302

- XIX. Certain Part 70 general conditions may duplicate or conflict with state general conditions. To the extent that any Part 70 conditions conflict with state general conditions, then the Part 70 general conditions control. To the extent that any Part 70 general conditions duplicate any state general conditions, then such state and Part 70 provisions will be enforced as if there is only one condition rather than two conditions.

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER19960009
Permit Number: 373-V0
Air - Title V Regular Permit Initial

AI2083

- 1 Provide DEQ with written notice of intention to demolish or renovate prior to performing activities to which 40 CFR 61 Subpart M applies. Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable. [40 CFR 61.145(b)(1)]
- 2 Do not install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. Subpart M. [40 CFR 61.148]
- 3 Comply with the requirements of 40 CFR 61.342(c) through (h) no later than 90 days following the effective date, unless a waiver of compliance has been obtained under 40 CFR 61.11, or by the initial startup for a new source with an initial startup after the effective date. Subpart FF. [40 CFR 61.342(h)]
- 4 Waste streams containing benzene: Remove or destroy the benzene contained in the waste using a treatment process or wastewater treatment system that complies with the standards specified in 40 CFR 61.348. Subpart FF. [40 CFR 61.342(c)(1)(i)]
- 5 Determine compliance with 40 CFR 61 Subpart FF using the test methods and procedures specified in 40 CFR 61.355(a) through (i), as applicable. Subpart FF. [40 CFR 61.355]
- 6 Equipment/operational data recordkeeping by electronic or hard copy continuously Maintain records as specified in 40 CFR 61.356(a) through (n). Maintain each record in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified. Subpart FF. [40 CFR 61.356]
- 7 Submit report. Due annually, beginning on the date that equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Submit updates to the information listed in 40 CFR 61.357(a)(1) through (a)(3) or, if the information in 40 CFR 61.357(a)(1) through (3) is not changed in the following year, a statement to that effect. Subpart FF. [40 CFR 61.357(d)(2)]
- 8 Include in the report required by 40 CFR 61.357(d)(2) a table presenting the information specified in 40 CFR 61.357(d)(5)(i) and (d)(5)(ii) for each waste stream. Subpart FF. [40 CFR 61.357(d)(5)]
- 9 Submit report. Due quarterly, beginning three months after the date that the equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Submit a certification that all of the required inspections have been carried out in accordance with the requirements of 40 CFR 61 Subpart FF. Subpart FF. [40 CFR 61.357(d)(6)]
- 10 Submit report. Due quarterly, beginning three months after the date that the equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Include the information specified in 40 CFR 61.357(d)(7)(i) through (d)(7)(v). Subpart FF. [40 CFR 61.357(d)(7)]
- 11 Submit report. Due annually, beginning one year after the date that the equipment necessary to comply with 40 CFR 61 Subpart FF has been certified in accordance with 40 CFR 61.357(d)(1). Submit a report that summarizes all inspections required by 40 CFR 61.342 through 61.354 during which detectable emissions are measured or a problem that could result in benzene emissions is identified, including information about the repairs or corrective action taken. Subpart FF. [40 CFR 61.357(d)(8)]
- 12 Notify DEQ of the alternative standard selected in the report required under 40 CFR 61.07 or 61.10. Subpart FF. [40 CFR 61.357(e)]
- 13 All affected facilities shall comply with all applicable provisions in 40 CFR 61 Subpart A. [40 CFR 61]
- 14 Develop a management system to oversee the implementation of the risk management program elements. [40 CFR 68.15(a)]
- 15 Assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements. [40 CFR 68.15(b)]
- 16 Define the lines of authority through an organization chart or similar document when responsibility for implementing individual requirements of 40 CFR 68 is assigned to persons other than the person identified under 68.15(b). [40 CFR 68.15(c)]
- 17 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the names or positions of the people, other than the person identified under 68.15(b), who are assigned responsibility for implementing individual requirements of 40 CFR 68. [40 CFR 68.15(c)]
- 18 Submit Risk Management Plan (RMP): Due no later than June 21, 1999, or three years after the date on which a regulated substance is first listed under 68.130, or the date on which a regulated substance is first present above a threshold quantity in a process. Submit in a method and format to a central point as specified by EPA prior to June 21, 1999. [40 CFR 68.150]
- 19 Provide in the RMP an executive summary that includes a brief description of the elements listed in 68.155(a) through (g). [40 CFR 68.155]

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- 20 Complete a single registration form and include in the RMP. Cover all regulated substances handled in covered processes. Include in the registration the information specified in 68.160(b)(1) through (13). [40 CFR 68.160]
- 21 Submit in the RMP information the release scenarios specified in 68.165(a)(2). Include the data listed in 68.165(b)(1) through (13). [40 CFR 68.165]
- 22 Submit in the RMP the information provided in 68.42(b) on each accident covered by 68.42(a). [40 CFR 68.168]
- 23 Provide in the RMP the information indicated in 68.175(b) through (p). [40 CFR 68.175]
- 24 Provide in the RMP the emergency response information listed in 68.180(a) through (c). [40 CFR 68.180]
- 25 Submit in the RMP a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete. [40 CFR 68.185(b)]
- 26 Submit revised registration to EPA: Due within six months after a stationary source is no longer subject to 40 CFR 68. Indicate that the stationary source is no longer covered. [40 CFR 68.190(c)]
- 27 Review and update the RMP as specified in 68.190(b) and submit it in a method and format to a central point specified by EPA prior to June 21, 1999. [40 CFR 68.190]
- 28 Maintain records supporting the implementation of 40 CFR 68 for five years unless otherwise provided. [40 CFR 68.200]
- 29 Use the endpoints specified in 68.22(a) through (g) for analyses of offsite consequences. [40 CFR 68.22]
- 30 Analyze the release scenarios in 68.25, as specified in 68.25(a) through (h). [40 CFR 68.25]
- 31 Identify and analyze at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes, as specified in 68.28(b) through (e). [40 CFR 68.28]
- 32 Estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 68.22(a). [40 CFR 68.30]
- 33 List in the RMP environmental receptors within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in 68.22(a). [40 CFR 68.33]
- 34 Submit revised RMP: Due within six months after changes in processes, quantities stored or handled, or any other aspect of the stationary source increase or decrease the distance to the endpoint by a factor of two or more. [40 CFR 68.36(b)]
- 35 Review and update the offsite consequence analyses at least once every five years. Complete a revised analysis within six months if changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more. [40 CFR 68.36]
- 36 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain the records specified in 68.39(a) through (e) on the offsite consequence analyses. [40 CFR 68.39]
- 37 Include in the five-year accident history all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage. Include the information specified in 68.42(b)(1) through (10) for each accidental release. [40 CFR 68.42]
- 38 Compile written process safety information, which includes information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process, before conducting any process hazard analysis required by 40 CFR 68.
- 39 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document that equipment complies with recognized and generally accepted good engineering practices. [40 CFR 68.65(d)(2)]
- 40 Determine that existing equipment, designed and constructed in accordance with codes, standards, or practices that are no longer in general use, is designed, maintained, inspected, tested, and operating in a safe manner. [40 CFR 68.65(d)(3)]

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- 41 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document that existing equipment, designed and constructed in accordance with codes, standards, or practices that are no longer in general use, is designed, maintained, inspected, tested, and operating in a safe manner. [40 CFR 68.65(d)(3)]
- 42 Determine the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. [40 CFR 68.67(a)]
- 43 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the priority order for conducting process hazard analyses based on a rationale which includes such considerations as extent of the process hazards, number of potentially affected employees, age of the process, and operating history of the process. [40 CFR 68.67(a)]
- 44 Use one or more of the methodologies in Sec. 68.67(b)(1) through (b)(7) to determine and evaluate the hazards of the process being analyzed. [40 CFR 68.67(b)]
- 45 Use a team with expertise in engineering and process operations to perform the process hazard analysis. Include at least one employee who has experience and knowledge specific to the process being evaluated, and at least one employee who is knowledgeable in the specific process hazard analysis methodology being used. [40 CFR 68.67(d)]
- 46 Establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions. [40 CFR 68.67(a)]
- 47 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the resolution of the recommendations of the team performing the process hazard analysis, and what actions are to be taken. [40 CFR 68.67(e)]
- 48 Update and validate the process hazard analysis at least every five years after the completion of the initial process hazard analysis, to assure that the process hazard analysis is consistent with the current process. Use a team that meets the requirements in Sec. 68.67(d). [40 CFR 68.67(f)]
- 49 Retain process hazards analyses and updates or validations for each process covered by this section, as well as the documented resolution of recommendations described in Sec. 68.67(e), for the life of the process. [40 CFR 68.67(g)]
- 50 Perform an initial process hazard analysis (hazard evaluation) on processes covered by 40 CFR 68 as soon as possible, but not later than June 21, 1999. The process hazard analysis shall identify, evaluate, and control the hazards involved in the process, and address the information in 40 CFR 68.67(c)(1) through (7). [40 CFR 68.67]
- 51 Develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information. Address steps for each operating phase, operating limits, safety and health considerations, and safety systems and their functions in the procedures. [40 CFR 68.69(a)]
- 52 Make operating procedures readily accessible to employees who work in or maintain a process. [40 CFR 68.69(b)]
- 53 Review operating procedures as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. Certify annually that these operating procedures are current and accurate. [40 CFR 68.69(c)]
- 54 Develop and implement safe work practices to provide for the control of hazards during specific operations. [40 CFR 68.69(d)]
- 55 Train each employee presently involved in operating a process, and each employee before being involved in operating a newly assigned process, in an overview of the process and in the operating procedures as specified in Sec. 68.69. Emphasize the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks. [40 CFR 68.71(a)(1)]
- 56 Provide refresher training at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. [40 CFR 68.71(b)]
- 57 Ascertain that each employee involved in operating a process has received and understood the training required by Sec. 68.71. [40 CFR 68.71(c)]
- 58 Equipment/operational data recordkeeping by electronic or hard copy continuously. Prepare a record which contains the identity of the employee, the date of training required by 40 CFR 68.71, and the means used to verify that the employee understood the training. [40 CFR 68.71 (c)]
- 59 Establish and implement written procedures to maintain the ongoing integrity of process equipment listed in Sec. 68.73(a). [40 CFR 68.73(b)]

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- 60 Train each employee involved in maintaining the ongoing integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner. [40 CFR 68.73(c)]
- 61 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document each inspection and test that has been performed on process equipment. Maintain records of the information specified in Sec. 68.73(d)(4). [40 CFR 68.73(d)(4)]
- 62 Perform inspections and tests following recognized and generally accepted good engineering practices on process equipment listed in 40 CFR 68.73(a). Make the frequency of inspections and tests consistent with applicable manufacturer's recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience. [40 CFR 68.73(d)]
- 63 Correct deficiencies in equipment that are outside acceptable limits before further use or in a safe and timely manner when necessary means are taken to assure safe operation. [40 CFR 68.73(e)]
- 64 Assure that equipment as it is fabricated is suitable for the process application for which it will be used, in the construction of new plants and equipment. Perform appropriate checks and inspections to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions. Assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used. [40 CFR 68.73(f)]
- 65 Inform employees involved in operating a process, and maintenance and contract employees whose job tasks will be affected, of a change in the process and train them in the change, prior to start-up of the process or affected part of the process. [40 CFR 68.75(c)]
- 66 Update the process safety information required by Sec. 68.65 if a change covered by 68.75 results in a change in the process safety information. [40 CFR 68.75(d)]
- 67 Update the operating procedures or practices required by Sec. 68.69 if a change covered by 68.75 results in a change in the operating procedures or practices. [40 CFR 68.75(e)]
- 68 Establish and implement written procedures to manage changes to process chemicals, technology, equipment, and procedures; and, changes to stationary sources that affect a covered process. Assure that the considerations specified in Sec. 68.75(b)(1) through (b)(5) are addressed prior to any change. [40 CFR 68.75]
- 69 Perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information. Safety review must confirm the information specified in Sec. 68.77(b)(1) through (b)(4) prior to the introduction of regulated substances to a process. [40 CFR 68.77]
- 70 Develop a report of the findings of the compliance audit required by 40 CFR 68.79(a). [40 CFR 68.79(c)]
- 71 Determine an appropriate response to each of the findings of the compliance audit. [40 CFR 68.79(d)]
- 72 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document the appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected. [40 CFR 68.79(d)]
- 73 Retain the two (2) most recent compliance audit reports. [40 CFR 68.79(e)]
- 74 Conduct compliance audit: Due at least every three years. Certify compliance with the provisions of the prevention program to verify that procedures and practices developed under 40 CFR 68 are adequate and are being followed. Conduct compliance audit by at least one person knowledgeable in the process. [40 CFR 68.79]
- 75 Establish an incident investigation team consisting of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident. [40 CFR 68.81 (c)]
- 76 Establish a system to promptly address and resolve the incident report findings and recommendations. [40 CFR 68.81(c)]
- 77 Equipment/operational data recordkeeping by electronic or hard copy continuously. Document resolutions and corrective actions of the incident report findings and recommendations. [40 CFR 68.81 (e)]
- 78 Conduct incident investigation: Due as promptly as possible, but not later than 48 hours following each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance. [40 CFR 68.81]
- 79 Prepare a report at the conclusion of the incident investigation which includes, at a minimum, the information specified in 40 CFR 68.81(d)(1) through (5). Review the report with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable. Retain the incident investigation reports for five years. [40 CFR 68.81]

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- 80 Develop a written plan of action regarding the implementation of the employee participation required by 40 CFR 68. [40 CFR 68.83(a)]
- 81 Consult with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management. [40 CFR 68.83(b)]
- 82 Provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under 40 CFR 68. [40 CFR 68.83(c)]
- 83 Issue a hot work permit for hot work operations conducted on or near a covered process. Document in the permit that the fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning the hot work operations; indicate the date(s) authorized for hot work; and identify the object on which hot work is to be performed. Keep permit on file until completion of the hot work operations. [40 CFR 68.85]
- 84 Obtain and evaluate information regarding the contract owner or operator's safety performance and programs, when selecting a contractor. [40 CFR 68.87(b)(1)]
- 85 Inform contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process. [40 CFR 68.87(b)(2)]
- 86 Explain to the contract owner or operator the applicable provisions of 40 CFR 68 Subpart E. [40 CFR 68.87(b)(3)]
- 87 Develop and implement safe work practices consistent with Sec. 68.69(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas. [40 CFR 68.87(b)(4)]
- 88 Periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in 40 CFR 68.87(c). [40 CFR 68.87(b)(5)]
- 89 Develop and implement an emergency response program for the purpose of protecting public health and the environment. Include in the program the elements listed in 40 CFR 68.95(a)(1) through (4). [40 CFR 68.95(a)]
- 90 Coordinate the emergency response plan developed under 68.95(a)(1) with the community emergency response plan developed under 42 U.S.C. 11003. Upon request of the local emergency planning committee or emergency response officials, promptly provide information necessary for developing and implementing the community emergency response plan. [40 CFR 68.95(c)]

EQT312 60F -- Oxide 2 Unit Flare

- 91 Monitor flares to assure that they are operated and maintained in conformance with their designs. Subpart A. [40 CFR 63.11 (b)(1)]
- 92 Operate at all times when emissions may be vented to the flare. Subpart A. [40 CFR 63.11 (b)(3)]
- 93 Design and operate for no visible emissions, as determined using Test Method 22 in Appendix A of 40 CFR 60, except for periods not to exceed a total of 5 minutes during any two consecutive hours. Subpart A. [40 CFR 63.11(b)(4)]
- 94 Operate with a flame present at all times. Subpart A. [40 CFR 63.11(b)(5)]
- 95 Presence of a flame monitored by flame monitor continuously. Use a thermocouple or any other equivalent device to detect the presence of a flame. Subpart A. [40 CFR 63.11 (b)(5)]
Which Months: All Year Statistical Basis: None specified
96 Heat content >= 200 BTU/scf (7.45 MJ/scm). Determine the net heating value of the gas being combusted using the equation specified in 40 CFR 63.11 (b)(6)(ii). Subpart A.
[40 CFR 63.11 (b)(6)(ii)]
Which Months: All Year Statistical Basis: None specified
97 Exit Velocity < 60 ft/sec (18.3 m/sec), as determined using the method specified in 40 CFR 63.11 (b)(7)(i). Subpart A. [40 CFR 63.11 (b)(7)(i)]
Which Months: All Year Statistical Basis: None specified
98 Comply with the provisions of 40 CFR 63.11 (b). Subpart G. [40 CFR 63.11 (a)(1)(i)]
99 Presence of a flame monitored by the regulation's specified method(s) continuously. Subpart G. [40 CFR 63.11 4(a)(2)]
Which Months: All Year Statistical Basis: None specified
100 Conduct a visible emission test using the techniques specified in 40 CFR 63.11 (b)(4). Subpart G. [40 CFR 63.11 6(a)(1)]

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EQT312 60F -- Oxide 2 Unit Flare

- 101 Determine the net heating value of the gas being combusted using the techniques specified in 40 CFR 63.11(b)(6). Subpart G. [40 CFR 63.116(a)(2)]
- 102 Determine the exit velocity using the techniques specified in either 40 CFR 63.11(b)(7)(i) or 63.11(b)(8), as appropriate. Subpart G. [40 CFR 63.116(a)(3)]
- 103 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]
- 104 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(1) through (a)(4). Subpart G. [40 CFR 63.118(a)]
- 105 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in 40 CFR 63.129(a) through (f). Subpart G. [40 CFR 63.129]

EQT465 41A-Tank 3358

- 106 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Tank stores ethylene glycol, a Class II TAP. MACT is not required. [LAC 33:III.5109.A]
- 107 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT466 42A-Tank 3360

- 108 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Tank stores ethylene glycol, a Class II TAP. MACT is not required. [LAC 33:III.5109.A]
- 109 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT469 46A-Tank 3361

- 110 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Tank stores ethylene glycol, a Class II TAP. MACT is not required. [LAC 33:III.5109.A]
- 109 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]
- 111 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.1.1 - 7, as applicable. [LAC 33:III.2103.1.]

EQT470 58-Tank C-301 Tetralin Surge Tank

- 112 Equip with a submerged fill pipe. Tank is also equipped with an 80% control efficiency air cooler. The vent from the Tetralin Surge Tank goes to an air cooler. Per design, it is 80% efficient. [LAC 33:III.2103.A]
- 113 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3-a-e. [LAC 33:III.2103.H.3]
- 114 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep records of the information specified in LAC 33:III.2103.1.1 - 7, as applicable. [LAC 33:III.2103.1.]
- 115 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Surge Tank emits Naphthalene a Class II TAP. Tank is equipped with submerged fill pipe and an 80% control efficiency air cooler. Compliance with 40 CFR 63 Subpart H determined as MACT. [LAC 33:III.5109.A]

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EQT470 58-Tank C-301 Tetralin Surge Tank

116 Surge control vessels and bottoms receivers: Equip with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements of 40 CFR 63.1172, except as provided in 40 CFR 63.162(b), or comply with the requirements of 40 CFR 63.119(b) or (c), if surge control vessel or bottoms receiver is not routed back to the process and meets the conditions specified in 40 CFR 63 Subpart H Table 2 or Table 3. [40 CFR 63.170]

EQT471 59B-Tank C-317 Tetralin Collection Pot

117 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

Tank emits Naphthalene, a Class II TAP. Compliance with Group 2 SOCMI HON determined as MACT. [LAC 33:III.51.09_A]

118 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. Keep the records as long as the storage vessel retains Group 2 status and is in operation. Subpart G. [40 CFR 63.123(a)]

EQT472 50-Waste Heat Boiler (F-603 Vent)

119 Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.

The Waste Heat Boiler stack serves as the stack for the Industrial Gas Turbine and Blow Off Oxidation Unit, Emission Points IGT-1 and BOU. [LAC 33:III.1101.B]

Which Months: All Year Statistical Basis: None specified

120 Total suspended particulate <= 0.6 lb/MMBTU of heat input.
The Waste Heat Boiler stack serves as the stack for the Industrial Gas Turbine and Blow Off Oxidation Unit, Emission Points IGT-1 and BOU. [LAC 33:III.1313.C]
Which Months: All Year Statistical Basis: None specified

121 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 1.S. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request.

The Waste Heat Boiler stack serves as the stack for the Industrial Gas Turbine and Blow Off Oxidation Unit, Emission Points IGT-1 and BOU. [LAC 33:III.1513]
122 Submit notification: Due at least 30 days prior to performance/emissions test to the Office of Environmental Assessment, Environmental Technology Division, Engineering Services, to provide the opportunity to conduct a pre-test meeting and observe the emission testing.

The Waste Heat Boiler stack serves as the stack for the Industrial Gas Turbine and Blow Off Oxidation Unit, Emission Points IGT-1 and BOU. [LAC 33:III.501.C.6]
123 Submit report: Due within 60 days after performance/emissions test. Submit emissions test results to the Office of Environmental Assessment, Environmental Technology Division, Engineering Services.

The Waste Heat Boiler stack serves as the stack for the Industrial Gas Turbine and Blow Off Oxidation Unit, Emission Points IGT-1 and BOU. [LAC 33:III.501.C.6]

124 Conduct a performance/emissions test: Due within 180 days after initial startup (or restart-up after modification), or within 100 days after initial TV permit issuance, or within 60 days after achieving normal production rate or end of the shutdown period, whichever is earliest. The stack test's purpose is to demonstrate compliance with the emission limits of this permit. Test methods and procedures shall be in accordance with New Source Performance Standards, 40 CFR 60, Appendix A, Method 7E - Determination of Nitrogen Oxides Emissions from Stationary Sources or Method 20 - Determination of Nitrogen Oxides, Sulfur Dioxide and Oxygen emissions from Stationary Gas Turbines, and Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources. Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. As required by LAC 33:III.913, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
The Waste Heat Boiler stack serves as the stack for the Industrial Gas Turbine and Blow Off Oxidation Unit, Emission Points IGT-1 and BOU. [LAC 33:III.501.C.6]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
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EQT472 50-Waste Heat Boiler (F-603 Vent)

- 125 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
The Waste Heat Boiler stack serves as the stack for the Industrial Gas Turbine (IGT) and Blow Off Oxidation Unit (BOU). The IGT is fuel fire equipment, and the BOU is the control device. Any residual hydrocarbons from the BOU are supplemental fuel in the IGT.
Determined as MACT. [LAC 33:III.5109.A]

EQT474 58A-Tetralin Heater

- 126 Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lanceing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes. [LAC 33:III.1101.B]
Which Months: All Year Statistical Basis: None specified
- 127 Total suspended particulate <= 0.6 lb/MMBTU of heat input. [LAC 33:III.1313.C]
Which Months: All Year Statistical Basis: None specified
- 128 Equipment/operational data recordkeeping by electronic or hard copy continuously. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.513]
- 129 Submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(c), 63.9(b) through (h) by the dates specified, as specified in 40 CFR 63.7545(b) through (c), as applicable. Subpart DDDDD. [40 CFR 63.7545(a)]

EQT475 60E-Oxide Flare (10")

- 130 Opacity <= 20 percent, except for a combined total of six hours in any 10 consecutive day period, for burning in connection with pressure valve releases for control over process upsets. [LAC 33:III.1105]
Which Months: All Year Statistical Basis: None specified
- 131 Submit notification Due to the Office of Environmental Compliance as soon as possible after the start of burning of pressure valve releases for control over process upsets. Notify in accordance with LAC 33:1.3923. Notification is required only if the upset cannot be controlled in six hours. [LAC 33:III.1105]
- 132 Submit report Due in writing to the Office of Environmental Compliance, Surveillance Division, within seven calendar days after startup or shutdown, if flaring was not the result of failure to maintain or repair equipment. Submit report if requesting exemption from the provisions of LAC 33:III.1105. Explain the conditions and duration of the startup or shutdown and list the steps necessary to remedy, prevent and limit the excess emissions. Minimize flaring and ensure that no ambient air quality standards are jeopardized. [LAC 33:III.1107]
- 133 Equipment/operational data recordkeeping by electronic or hard copy continuously. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III.Chapter 15. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA on request. [LAC 33:III.513]
- 134 Equipment/operational data recordkeeping by electronic or hard copy as needed. Maintain records to demonstrate that the criteria are being met for any exemption claimed. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request. [LAC 33:III.2115.K]
- 135 Flare gas: Heat content > 300 BTU/scf, to ensure destruction of emissions to the flare stack. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: None specified
- 136 Presence of a flame monitored by heat sensing device continuously. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: None specified
- 137 Presence of a flame recordkeeping by electronic or hard copy continuously. [LAC 33:III.501.C.6]

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EQT475 60E-Oxide Flare (10")

- I 38 Flare gas: Heat content recordkeeping by electronic or hard copy once initially, and whenever flare is tested. Keep records for at least five years. [LAC 33:III.501.C.6]
I 39 Flare gas: Heat content monitored by gas analysis once every five years, or whenever process changes, to insure the heat content is above 300 BTU/scf.
Test flare every five years or whenever there is a process change. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: None specified

EQT477 Tank C-311 (EDC)

- I 40 Equip with a vapor loss control system, consisting of a gathering system capable of collecting volatile organic compound vapors and a vapor disposal system capable of processing such organic vapors. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
This is a feed tank storing Ethylene Dichloride (EDC). Any emissions are routed to Oxide 2 Flare 60E. [LAC 33:III.2103.A]
I 41 VOC, Total >= 95 % control efficiency using a vapor loss control system. This limitation does not apply during periods of planned routine maintenance which may not exceed 240 hours per year. [LAC 33:III.21.03.E.1]
Which Months: All Year Statistical Basis: None specified
I 42 Determine VOC maximum true vapor pressure using the methods in LAC 33:III.2103.H.3.a-c. [LAC 33:III.2103.H.3]
I 43 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1 - 7, as applicable. [LAC 33:III.2103.I]
I 44 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
This is a feed tank storing Ethylene Dichloride (EDC). Emissions routed to Flare 60E, determined as MACT. [LAC 33:III.5109.A]
- I 45 Organic HAP >= 98 % reduction by weight, or <= 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.116(c). For combustion devices, calculate emission reduction or concentration on a dry basis, corrected to 3-percent oxygen. Subpart G. [40 CFR 63.113(a)(2)]
Which Months: All Year Statistical Basis: None specified
I 46 Temperature monitored by temperature monitoring device continuously. Equip the temperature monitoring device with a continuous recorder and install in the gas stream immediately before and after the catalyst bed. Subpart G. [40 CFR 63.114(a)(1)]
Which Months: All Year Statistical Basis: None specified
I 47 Bypass lines: Flow monitored by flow indicator once every 15 minutes. Equip the flow indicator with a recorder that takes a reading at least once every 15 minutes and install at the entrance to any bypass line that could divert the gas stream to the atmosphere. Subpart G. [40 CFR 63.114(d)(1)]
Which Months: All Year Statistical Basis: None specified
I 48 Bypass lines: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.114(d)(2)]
I 49 Bypass lines: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]
Which Months: All Year Statistical Basis: None specified
I 50 Conduct a performance test using the procedures in 40 CFR 63.116(c)(1) through (c)(4). Subpart G. [40 CFR 63.116(c)]
I 51 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.117(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.117(a)]
I 52 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.118(a)(1) through (a)(4). Subpart G. [40 CFR 63.118(a)]

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EQT619 IGT-1 Industrial Gas Turbine

153 Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes.
 The stack for this turbine is Emission Point 50, Waste Heat Boiler (F-603 Vent) Stack. [LAC 33:III.1101.B]

Which Months: All Year Statistical Basis: None specified

154 Total suspended particulate <= 0.6 lb/MMBTU of heat input.

The stack for this turbine is Emission Point 50, Waste Heat Boiler (F-603 Vent) Stack. [LAC 33:III.1313.C]

Which Months: All Year Statistical Basis: None specified

155 Equipment/operational data recordkeeping by electronic or hard copy continuously. Record and keep on site for at least two years the data required to demonstrate exemption from the provisions of LAC 33:III. Chapter 1.5. Record all emissions data in the units of the standard using the averaging time of the standard. Make records available to a representative of DEQ or the U.S. EPA, on request.

The stack for this turbine is Emission Point 50, Waste Heat Boiler (F-603 Vent) Stack. [LAC 33:III.1513]

156 Submit notification: Due at least 30 days prior to performance/emissions test to the Office of Environmental Assessment, Environmental Technology Division, Engineering Services, to provide the opportunity to conduct a pretest meeting and observe the emission testing.

The stack for this turbine is Emission Point 50, Waste Heat Boiler (F-603 Vent) Stack. [LAC 33:III.501.C.6]

157 Submit report: Due within 60 days after performance/emissions test. Submit emissions test results to the Office of Environmental Assessment, Environmental Technology Division, Engineering Services.

The stack for this turbine is Emission Point 50, Waste Heat Boiler (F-603 Vent) Stack. [LAC 33:III.501.C.6]

158 Conduct a performance/emissions test: Due within 180 days after initial startup (or restart-up after modification), or within 60 days after achieving normal production rate or end of the shutdown period, whichever is earliest. The stack test's purpose is to demonstrate compliance with the emission limits of this permit. Test methods and procedures shall be in accordance with New Source Performance Standards, 40 CFR 60, Appendix A, Method 7E - Determination of Nitrogen Oxides Emissions from Stationary Sources or Method 20 - Determination of Nitrogen Oxides, Sulfur Dioxide and Oxygen emissions from Stationary Gas Turbines, and Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources. Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. As required by LAC 33:III.91.3, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.

The stack for this turbine is Emission Point 50, Waste Heat Boiler (F-603 Vent) Stack. [LAC 33:III.501.C.6]

159 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

Source will comply with recordkeeping requirements of NESHAP 63.6155. Any residual hydrocarbons from the BOU (control device) are burned as supplemental fuel in the IGT. Determined as MACT

The stack for this turbine is Emission Point 50, Waste Heat Boiler (F-603 Vent) Stack. [LAC 33:III.5109.A]

EQT622 Process Wastewater Streams

160 Determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in 40 CFR 63.132(a)(1)(i) or (a)(1)(ii), and (a)(1)(iii). Subpart G. [40 CFR 63.132(a)(1)]

161 For wastewater streams that are Group 2 for table 9 compounds, comply with the applicable recordkeeping and reporting requirements specified in 63.146(b)(1) and 63.147(b)(8). [40 CFR 63.132(a)(3)]

162 Determine total annual average concentration of Table 9 compounds according to the procedures in 40 CFR 63.144(b), and determine annual average flow rate according to the procedures in 40 CFR 63.144(c), to determine whether a waste water stream is Group 1 or Group 2 for Table 9 compounds. Subpart G. [40 CFR 63.132(c)]

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EQT622 Process Wastewater Streams

- 163 Determine annual average concentration for each Table 8 compound according to the procedures specified in 40 CFR 63.1.44(b), and determine annual average flow rate according to the procedures specified in 40 CFR 63.1.44(c), to determine whether a wastewater stream is Group 1 or Group 2 for Table 8 compounds. Subpart G. [40 CFR 63.1.2(d)]
- 164 Do not discard liquid or solid organic materials with a concentration of greater than 1,000 ppm of Table 9 compounds (as determined by analysis of the stream composition, engineering calculations, or process knowledge, according to the provisions of 40 CFR 63.1.44(b)) from a chemical manufacturing process unit to water or wastewater, unless the receiving stream is managed and treated as a Group 1 wastewater stream. Subpart G. [40 CFR 63.1.32(f)]
- 165 Comply with the inspection requirements in 40 CFR 63 Subpart G Table 11. Subpart G. [40 CFR 63.1.43(a)]
- 166 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records specified in 40 CFR 63.147(a) through (f), as applicable. Subpart G. [40 CFR 63.1.47]
- 167 Comply with the provisions of 40 CFR 63 Subpart G Table 35 for each item of equipment meeting all the criteria specified in 40 CFR 63.1.49(b) through (d) and either (e)(1) or (e)(2). Subpart G. [40 CFR 63.1.49(a)]

FUG009 196J-Fugitive Emissions

- 168 LAC 33:III.21[2] Compliance is achieved by compliance with Louisiana Fugitive Emissions Program Consolidation Guidelines. See the Streamlined Equipment Leaks Monitoring Program Tables 1 and 2. [LAC 33:III.21[2]]
- 169 STREAMLINED FUGITIVE EMISSIONS PROGRAM

TABLE I

Permittee shall comply with a streamlined equipment leaks monitoring program. Compliance with the streamlined program in accordance with this specific condition shall serve to comply with each of the fugitive emission monitoring programs being streamlined, as indicated in Table I. Noncompliance with the streamlined program in accordance with this specific condition may subject the permittee to enforcement action for one of the applicable fugitive emissions programs.

- a. Streamlined program shall be applicable to the combined universe of components subject to any of the programs being streamlined. Any component type which does not require periodic monitoring under the overall most stringent program shall be monitored as required by the most stringent requirements of any other program being streamlined and will not be exempted. The streamlined program will include any exemptions based on size or component available in any of the programs being streamlined.
- b. Leak definitions and monitoring frequency shall be used based on the overall most stringent program. Percent leaker performance shall be calculated using the provisions of the overall most stringent program. Annual monitoring shall be defined as once every four quarters. Some allowance may be made in the first year on the streamlined program in order to allow for transition from existing monitoring schedules.
- c. Permittee shall comply with recordkeeping and reporting requirements of the overall most stringent program. Semiannual reports shall be submitted on September 30 and March 31, to cover the periods from January 1 through June 30 and July 1 through December 31, respectively. The semiannual reports shall include any monitoring performed within the reporting period. [LAC 33:III.50].C.6]

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STREAMLINED FUGITIVES PROGRAM

TABLE 2

Unit or Plant Site	Programs Streamlined	Stream Applicability	Overall Most Stringent Program
Oxide 2	40 CFR 63 Subpart H Non HON MACT NSPS LAC 33:III.21.21	5% VOHAP 5% VOHAP 10% VOC 10% VOC	40 CFR 60 Subpart H

[LAC 33:III.501.C.6]

171 Comply with SOCMIHON Subpart H, Non-HON MACT, NSPS and LAC 33:III Chapter 21 by implementing the Louisiana Consolidated Fugitive Emission Program Guidelines. Compliance is achieved through compliance with 40 CFR 63 Subpart H. [LAC 33:III.501]

172 Identify each piece of equipment in a process unit such that it can be distinguished readily from equipment that is not subject to 40 CFR 63 Subpart H. [40 CFR 63.1.62(c)]

173 Clearly identify leaking equipment, for leaking equipment detected as specified in 40 CFR 63.1.63, 40 CFR 63.1.64, 40 CFR 63.1.68, 40 CFR 63.1.69, and 40 CFR 63.1.72 through 63.1.74. The identification may be removed after the equipment is repaired, except for valves or for connectors subject to 40 CFR 63.1.74(c)(1)(i). The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.1.68(f)(3) and 63.1.75(e)(i)(D), and no leak has been detected during the follow-up monitoring. If electing to comply using the provisions of 40 CFR 63.1.74(c)(1)(i), the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.1.74(c)(1)(i) and no leak is detected during that monitoring. Subpart H. [40 CFR 63.1.62(l)]

174 Pumps in light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, except as provided in 40 CFR 63.1.62(b) and 63.1.63(c) through (l). If a reading of 10,000 ppm (phase II); 5,000 ppm (phase III); or 5,000 ppm (phase III), pumps handling polymerizing monomers, 2,000 ppm (phase III, Pumps in food/medical service), or 1,000 ppm (phase III, all other pumps) or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.1.63(c). Subpart H. [40 CFR 63.1.63(b)(1)]

Which Months: All Year Statistical Basis: None specified
 H. [40 CFR 63.1.63(b)(3)]

175 Pumps in light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. If a leak is detected, initiate the repair provisions specified in 40 CFR 63.1.63(c). Subpart H. [40 CFR 63.1.63(d)(2)]

Which Months: All Year Statistical Basis: None specified
 H. [40 CFR 63.1.63(b)(3)]

176 Pumps in light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.1.63(c)(3) and 40 CFR 63.1.71. Subpart H. [40 CFR 63.1.63(c)]

177 Pumps in light liquid service: Implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.1.76, if, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak. Subpart H. [40 CFR 63.1.63(d)(2)]

178 Pumps in light liquid service: Determine percent leaking pumps using the equation in 40 CFR 63.1.63(d)(4). Subpart H. [40 CFR 63.1.63(d)(4)]

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- 179 Pumps in light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or equip with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(1)]
- 180 Pumps in light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid service. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(2)]
- 181 Pumps in light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(3)]
- 182 Pumps in light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the pump seal. If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, monitor the pump as specified in 40 CFR 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid. If an instrument reading of 1,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(4)]
- Which Months: All Year Statistical Basis: None specified
- 183 Pumps in light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)(i)]
- 184 Pumps in light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)(6)(ii)]
- 185 Pumps in light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the pump is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.163(e)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.163(e)(6). Comply with this requirement instead of the requirements in 40 CFR 63.163(a) through (d). Subpart H. [40 CFR 63.163(e)]
- Which Months: All Year Statistical Basis: None specified
- 186 Pumps in light liquid service (unsafe-to-monitor): Determine that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.163(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(1)]
- 187 Pumps in light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.163(b) through (e). Subpart H. [40 CFR 63.163(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- 188 Compressors: Equip with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.162(b) and 40 CFR 63.164(h) and (i). Subpart H. [40 CFR 63.164(a)]
- 189 Compressors: Operate the seal system with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or equip with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid directly into a process stream. Subpart H. [40 CFR 63.164(b)]
- 190 Compressors: Ensure that the barrier fluid is not in light liquid service. Subpart H. [40 CFR 63.164(c)]
- 191 Compressors: Equip each barrier fluid system as described in 40 CFR 63.164(a) through (c) with a sensor that will detect failure of the seal system, barrier fluid system, or both. Subpart H. [40 CFR 63.164(d)]

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- 192 Compressors (sensor): Determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. Subpart H. [40 CFR 63.164(e)(2)]
- 193 Compressors: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.164(g)]
- 194 Compressors (no detectable emissions): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially and annually, and at other times requested by DEQ. Comply with this requirement instead of the requirements in 40 CFR 63.164(a) through (h). Subpart H. [40 CFR 63.164(i)(2)]
- 195 Compressors (sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an alarm, unless the compressor is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under 40 CFR 63.164(e)(2), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.164(g). Subpart H. [40 CFR 63.164]
- 196 Pressure relief device in gas/vapor service: Organic HAP < 500 ppm above background except during pressure releases, as determined by the method specified in 63.180(c). Subpart H. [40 CFR 63.165(a)]
- Which Months: All Year Statistical Basis: None specified
- 197 Pressure relief devices in gas/vapor service: After each pressure release, return to a condition indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.165(b)(1)]
- 198 Pressure relief devices in gas/vapor service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) after the pressure release and being returned to organic HAP service, to confirm the condition indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 63.180(c). Subpart H. [40 CFR 63.165(b)(2)]
- Which Months: All Year Statistical Basis: None specified
- 199 Pressure relief devices in gas/vapor service (rupture disk): After each pressure release, install a new rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.165(a) and (b). Subpart H. [40 CFR 63.165(d)(2)]
- 200 Sampling connection systems: Equip with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b). Operate the system as specified in 40 CFR 63.166(b). Subpart H. [40 CFR 63.166]
- 201 Open-ended valves or lines: Equip with a cap, blind flange, plug, or second valve, except as provided in 40 CFR 63.162(b) and 40 CFR 63.167(d) and (e). Ensure that the cap, blind flange, plug or second valve seals the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. Operate each open-ended valve or line equipped with a second valve in a manner such that the valve on the process fluid end is closed before the second valve is closed. Subpart H. [40 CFR 63.167]
- 202 Valves in gas/vapor service or liquid service (Phase I): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- Which Months: All Year Statistical Basis: None specified
- 203 Valves in gas/vapor service or liquid service (Phase II): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Subpart H. [40 CFR 63.168(c)]
- Which Months: All Year Statistical Basis: None specified

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AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER19960009

Permit Number: 373-YO

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FUG009 196J-Fugitive Emissions

204 Valves in gas/vapor service or light liquid service (Phase III, 2 percent or greater leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly, as specified in 40 CFR 63.180(b); or implement a quality improvement program for valves that complies with the requirements of 40 CFR 63.175 and monitor quarterly. If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). If electing to implement a quality improvement program, follow the procedures in 40 CFR 63.175. Subpart H. [40 CFR 63.168(g)(1)]

Which Months: All Year Statistical Basis: None specified
205 Valves in gas/vapor service or light liquid service (Phase III, less than 2 percent leaking valves): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 quarterly, as specified in 40 CFR 63.180(b). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.168(f). Permittee may elect to comply with the alternate standards in 40 CFR 63.168(d)(3) and (d)(4). Subpart H. [40 CFR 63.168(d)(2)]

Which Months: All Year Statistical Basis: None specified
206 Valves in gas/vapor service or light liquid service: Determine percent leaking valves using the equation in 40 CFR 63.168(e)(1). Subpart H. [40 CFR 63.168(e)(1)]
207 Valves in gas/vapor service or light liquid service (after leak repair): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within three months (at least) after repair to determine whether the valve has resumed leaking. Subpart H. [40 CFR 63.168(f)(3)]

Which Months: All Year Statistical Basis: None specified
208 Valves in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.168(f)]

209 Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.168(b) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(1)]

210 Valves in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the valves as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (f). Subpart H. [40 CFR 63.168(h)(2)]

Which Months: All Year Statistical Basis: None specified
211 Valves in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(1)]

212 Valves in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the valves at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.168(b) through (d). Subpart H. [40 CFR 63.168(i)(3)]

Which Months: All Year Statistical Basis: None specified
213 Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 within 5 days (calendar) if evidence of a potential leak to the atmosphere is found by visible, audible, olfactory, or any other detection method. If a reading of 10,000 ppm for agitators, 5,000 ppm for pumps handling polymerizing monomers, 2,000 ppm for all other pumps (including pumps in food/medical service), or 500 ppm for valves, connectors, instrumentation systems, and pressure relief devices, or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.169(c). Subpart H. [40 CFR 63.169(a)]

Which Months: All Year Statistical Basis: None specified
214 Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.169(c)]

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- 215 Surge control vessels and bottoms receivers: Equip with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements of 40 CFR 63.172, except as provided in 40 CFR 63.162(b), or comply with the requirements of 40 CFR 63.119(b) or (c), if surge control vessel or bottoms receiver is not routed back to the process and meets the conditions specified in 40 CFR 63 Subpart H Table 2 or Table 3.
Subpart H. [40 CFR 63.170]
- 216 Closed-vent system (hard-piping): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(i)]
- Which Months: All Year Statistical Basis: None specified
- 217 Closed-vent system (hard-piping): Presence of a leak monitored by visual, audible, and/or olfactory annually. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(1)(ii)]
- Which Months: All Year Statistical Basis: None specified
- 218 Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once initially according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(2)(i)]
- Which Months: All Year Statistical Basis: None specified
- 219 Closed-vent system (duct work): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually according to the procedures in 40 CFR 63.180(b). If an instrument reading greater than 500 ppm above background is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.172(h). Subpart H. [40 CFR 63.172(f)(2)(ii)]
- Which Months: All Year Statistical Basis: None specified
- 220 Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.172(i). Subpart H. [40 CFR 63.172(h)]
- 221 Closed-vent system (bypass lines): Flow monitored by flow indicator once every 15 minutes. Install flow indicator at the entrance to any bypass line. Subpart H. [40 CFR 63.172(j)(1)]
- Which Months: All Year Statistical Basis: None specified
- 222 Closed-vent system (bypass lines): Flow recordkeeping by electronic or hard copy once every 15 minutes. Generate records as specified in 40 CFR 63.118(a)(3). Subpart H. [40 CFR 63.172(j)(2)]
- 223 Closed-vent system (bypass lines): Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart H. [40 CFR 63.172(j)(2)]
- 224 Closed-vent system (bypass lines): Seal or closure mechanism monitored by visual inspection/determination monthly to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart H. [40 CFR 63.172(j)(2)]
- Which Months: All Year Statistical Basis: None specified
- 225 Closed-vent system (unsafe-to-inspect): Demonstrate that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential dangers as a consequence of complying with 40 CFR 63.172(f)(1) or (f)(2). Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(1)]
- 226 Closed-vent system (unsafe-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(k)(2)]
- Which Months: All Year Statistical Basis: None specified

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- 227 Closed-vent system (difficult-to-inspect): Demonstrate that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(1)]
- 228 Closed-vent system (difficult-to-inspect): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every five years. Maintain a written plan that requires inspection of the equipment at least once every five years. Comply with this requirement instead of the requirements in 40 CFR 63.172(f)(1) and (f)(2). Subpart H. [40 CFR 63.172(l)(2)]
- Which Months: All Year Statistical Basis: None specified
- 229 Ensure that the closed-vent system or control device is operating whenever organic HAP emissions are vented to the closed-vent system or control device. Subpart H. [40 CFR 63.172(m)]
- 230 Agitators in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 monthly to detect leaks, as specified in 40 CFR 63.180(b). If an instrument reading of 10,000 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(a)]
- Which Months: All Year Statistical Basis: None specified
- 231 Agitators in gas/vapor service or light liquid service: Presence of a leak monitored by visual inspection/determination weekly (calendar) for indications of liquids dripping from the agitator. If there are indications of liquids dripping from the agitator, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.173(c). Subpart H. [40 CFR 63.173(b)]
- Which Months: All Year Statistical Basis: None specified
- 232 Agitators in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171. Subpart H. [40 CFR 63.173(c)]
- 233 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Operate with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or equip with a barrier fluid degressing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or equip with a closed-loop system that purges the barrier fluid into a process stream. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(1)]
- 234 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Ensure that the barrier fluid is not in light liquid organic HAP service. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(2)]
- 235 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Equip barrier fluid system with a sensor that will detect failure of the seal system, barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(3)]
- 236 Agitators in gas/vapor service or light liquid service (dual mechanical seal system): Presence of a leak monitored by visual inspection/determination weekly (calendar). Monitor for indications of liquids dripping from the agitator seal. If there are indications of liquid dripping from the agitator seal at the time of the weekly inspection, monitor the agitator as specified in 40 CFR 63.180(b) to determine the presence of organic HAP in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If a leak is detected, initiate the repair provisions in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(4)]
- Which Months: All Year Statistical Basis: None specified
- 237 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)(i)]
- 238 Agitators in gas/vapor service and light liquid service (dual mechanical seal system): Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171. Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)(6)]

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239 Agitators in gas/vapor service or light liquid service (dual mechanical seal system - sensor): Equipment/operational data monitored by visual inspection/determination daily, or equip with an audible alarm unless the agitator is located within the boundary of an unmanned plant site. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criteria established in 40 CFR 63.173(d)(6), a leak is detected. If a leak is detected, initiate repair provisions specified in 40 CFR 63.173(d)(6). Comply with this requirement instead of the requirements in 40 CFR 63.173(a). Subpart H. [40 CFR 63.173(d)]

Which Months: All Year Statistical Basis: None specified

240 Agitators in gas/vapor service or light liquid service (unmanned plant site): Presence of a leak monitored by visual inspection/determination at the regulation's specified frequency. Monitor each agitator as often as practicable and at least monthly. Comply with this requirement instead of the weekly visual inspection requirement of 40 CFR 63.173(b)(1) and (d)(4), and the daily requirements of 40 CFR 63.173(d)(5). Subpart H. [40 CFR 63.173(g)]

Which Months: All Year Statistical Basis: None specified

241 Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Demonstrate that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d).

Subpart H. [40 CFR 63.173(h)(1)]

242 Agitators in gas/vapor service or light liquid service (difficult-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Maintain a written plan that requires monitoring of the agitator at least once per calendar year. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(h)(3)]

Which Months: All Year Statistical Basis: None specified

243 Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.173(a) through (d). Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(1)]

Which Months: All Year Statistical Basis: None specified

244 Agitators in gas/vapor service or light liquid service (unsafe-to-monitor): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 at the regulation's specified frequency. Maintain a written plan that requires monitoring of the agitator as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.173(a) through (d). Subpart H. [40 CFR 63.173(j)(2)]

Which Months: All Year Statistical Basis: None specified

245 Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within 12 months after the compliance date, except as provided in 40 CFR 63.174(f) through (h). If an instrument reading of 500 ppm or greater is recorded, a leak is detected. If a leak is detected, initiate repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(1)]

Which Months: All Year Statistical Basis: None specified

246 Connectors in gas/vapor service or light liquid service: Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once within the first 12 months after initial startup or by no later than 12 months after the date of promulgation of a specific subpart that references 40 CFR 63 Subpart H, whichever is later, except as specified in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(b)(2)]

Which Months: All Year Statistical Basis: None specified

247 Connectors in gas/vapor service or light liquid service (0.5% or greater leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 annually. Subpart H. [40 CFR 63.174(b)(3)(i)]

Which Months: All Year Statistical Basis: None specified

248 Connectors in gas/vapor service or light liquid service (less than 0.5% leaking): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21 once every two years. Subpart H. [40 CFR 63.174(b)(3)(ii)]

Which Months: All Year Statistical Basis: None specified

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249 Connectors in gas/vapor service or light liquid service (opened or otherwise had the seal broken): Presence of a leak monitored by 40 CFR 60, Appendix A, Method 21 within three months after being returned to organic HAP service or when it is reconnected. If monitoring detects a leak, repair according to the provisions of 40 CFR 63.174(d), as specified, except as provided in 40 CFR 63.174(e)(1)(ii). Subpart H. [40 CFR 63.174(c)(1)(i)]

Which Months: All Year Statistical Basis: None specified

250 Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Comply with the requirements of 40 CFR 63.169. Subpart H. [40 CFR 63.174(c)(2)(i)]

251 Connectors in gas/vapor service or light liquid service (2 inches or less in nominal diameter): Organic HAP monitored by technically sound method within three months after being returned to organic HAP service after having been opened or otherwise had the seal broken. If monitoring detects a leak, implement repair provisions in 40 CFR 63.174(d). Subpart H. [40 CFR 63.174(c)(2)(ii)]

Which Months: All Year Statistical Basis: None specified

252 Connectors in gas/vapor service or light liquid service: Make a first attempt at repair no later than 5 calendar days after each leak is detected, and complete repairs no later than 15 calendar days after it each leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Subpart H. [40 CFR 63.174(d)]

253 Connectors in gas/vapor service or light liquid service (unsafe-to-monitor): Demonstrate that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with 40 CFR 63.174(a) through (c). Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(1)]

254 Connectors in gas/vapor service or light liquid service (unsafe-to-repair): Organic HAP monitored by 40 CFR 60, Appendix A, Method 21, at the regulation's specified frequency. Maintain a written plan that requires monitoring of connectors as frequently as practicable during safe to monitor times, but not more frequently than the periodic schedule otherwise applicable. Comply with this requirement instead of the requirements in 40 CFR 63.174(a). Subpart H. [40 CFR 63.174(f)(2)]

Which Months: All Year Statistical Basis: None specified

255 Connectors in gas/vapor service or light liquid service (unsafe-to-repair): Demonstrate that repair personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 63.174(d). Comply with this requirement instead of the requirements in 40 CFR 63.174(a), (d), and (e). Subpart H. [40 CFR 63.174(g)]

256 Connectors in gas/vapor service or light liquid service (inaccessible, ceramic, or ceramic-lined): Make a first attempt at repair within 5 days after leak is detected by visual, audible, olfactory or other means, and complete repairs no later than 15 calendar days after leak is detected, except as provided in 40 CFR 63.171 and 63.174(g). Comply with this requirement instead of the monitoring requirements of 40 CFR 63.174(a) and (c) and from the recordkeeping and reporting requirements of 40 CFR 63.181 and 63.182. Subpart H. [40 CFR 63.174(h)(2)]

257 Connectors in gas/vapor service or light liquid service: Calculate percent leaking connectors as specified in 40 CFR 63.174(i)(1) and (i)(2). Subpart H. [40 CFR 63.174(i)]

258 Comply with the test methods and procedures requirements provided in 40 CFR 63.180. Subpart H. [40 CFR 63.180]

259 Equipment/operational data recordkeeping by electronic or hard copy at the regulation's specified frequency. Maintain records as specified in 40 CFR 63.181 (a) through (k). Subpart H. [40 CFR 63.181]

260 Submit Initial Notification: Due within 120 days after the date of promulgation of the subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(b)(1). Subpart H. [40 CFR 63.182(b)]

261 Submit Notification of Compliance Status: Due within 90 days of the compliance dates specified in the 40 CFR 63 subpart that references 40 CFR 63 Subpart H. Include the information specified in 40 CFR 63.182(c)(1) through (c)(3). Subpart H. [40 CFR 63.182(c)]

262 Submit Periodic Reports: Due semiannually starting 6 months after the Notification of Compliance Status, as required in 40 CFR 63.182(c). Include the information specified in 40 CFR 63.182(d)(2) through (d)(4). Subpart H. [40 CFR 63.182(d)]

GRP094 Oxide 2 Unit

SPECIFIC REQUIREMENTS

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GRP094 Oxide 2 Unit

- 263 Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited. [LAC 33:III.110.3]
- 264 Outdoor burning of waste material or other combustible material is prohibited. [LAC 33:III.109.B]
- 265 Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited. [LAC 33:III.1303.B]
- 266 Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.211.3.A.1-5. [LAC 33:III.2113.A]
- 267 Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance. [LAC 33:III.211.9]
- 268 Discharges of odorous substances at or beyond property lines which cause a perceived odor intensity of six or greater on the specified eight point butanol scale as determined by Method 41 of LAC 33:III.2901.G are prohibited. [LAC 33:III.2901.D]
- 269 If requested to monitor for odor intensity, take and transport samples in a manner which minimizes alteration of the samples either by contamination or loss of material. Evaluate all samples as soon after collection as possible in accordance with the procedures set forth in LAC 33:III.2901.G. [LAC 33:III.2901.F]
- 270 Maintain best practical housekeeping and maintenance practices at the highest possible standards to control emissions of highly reactive volatile organic compounds (HR VOC), which include 1,3-Butadiene, Butene, cis-2-Butene, trans-2-Butene, Ethylene, Propylene, Toluene, Xylene, m/p-Xylene, o-Xylene. [LAC 33:III.501.C.6]
- 271 Maintain, to the extent practicable, a leak-free facility taking such steps as are necessary and reasonable to prevent leaks and to expeditiously repair leaks that occur. Update the written plan presently required by LAC 33:III.211.3.A.4 within 30 days of receipt of this permit to incorporate these general duty obligations into the housekeeping procedures. The plan shall then be considered a means of emission control subject to the required use and maintenance provisions of LAC 33:III.905. Failure to develop, use, and diligently maintain the plan shall be a violation of this permit. [LAC 33:III.501.C.6]
- 272 Carbon monoxide <= 170.07 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 273 Nitrogen oxides <= 476.9 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 274 Particulate matter (10 microns or less) <= 10.21 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 275 Sulfur dioxide <= 4.96 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 276 VOC, Total <= 89.48 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 277 Vinyl chloride <= 0.17 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 278 1,2-Dichloroethane <= 0.38 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 279 1,4-Dioxane <= 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 280 Acetaldehyde <= 0.23 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum

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GRP094 Oxide 2 Unit

- 281 Acrolein < 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 282 Chloroethane <= 0.17 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 283 Ethylene glycol <= 6.12 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 284 Ethylene oxide <= 3.81 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 285 Formaldehyde < 0.01 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 286 Hydrochloric acid <= 0.10 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 287 Naphthalene <= 0.85 tons/yr. [LAC 33:III.501.C.6]
Which Months: All Year Statistical Basis: Annual maximum
- 288 Do not construct or modify any stationary source subject to any standard set forth in LAC 33:III Chapter 51 Subchapter A without first obtaining written authorization from DEQ in accordance with LAC 33:III Chapter 51 Subchapter A, after the effective date of the standard. [LAC 33:III.5105.A.1]
- 289 Do not cause a violation of any ambient air standard listed in LAC 33:III Table 51.2, unless operating in accordance with LAC 33:III.5109. [LAC 33:III.5105.A.2]
- 290 Do not build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission that would otherwise constitute a violation of an applicable standard. [LAC 33:III.5105.A.3]
- 291 Do not fail to keep records, notify, report or revise reports as required under LAC 33:III Chapter 51 Subchapter A. [LAC 33:III.5105.A.4]
- 292 Submit Annual Emissions Report (TERD): Due annually, by the 1st of July, to the Office of Environmental Assessment, Air Quality Assessment Division, in a format specified by DEQ. Identify the quantity of emissions in the previous calendar year for any toxic air pollutant listed in Table 51.1 or Table 51.3. [LAC 33:III.5107.A.2]
- 293 Include a certification statement with initial and subsequent annual emission reports and revisions to any emission report to attest that the information contained in the emission report is true, accurate, and complete, and signed by a responsible official, as defined in LAC 33:III.502. Include the full name of the responsible official, title, signature, date of signature and phone number of the responsible official. The certification statement shall read: "I certify, under penalty of perjury, that the emissions data provided is accurate to the best of my knowledge, information, and belief, and I understand that submitting false or misleading information will expose me to prosecution under state regulations" [LAC 33:III.5107.A.3]
- 294 Submit notification: Due to the Department of Public Safety 24-hour Louisiana Emergency Hazardous Materials Hotline at (225) 925-6595 immediately, but no later than 1 hour, after any discharge of a toxic air pollutant into the atmosphere which results or threatens to result in an emergency condition (a condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water or air environment, or cause severe damage to property). [LAC 33:III.5107.B.1]
- 295 Submit notification: Due to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC), except as provided in LAC 33:III.5107.B.6, no later than 24 hours after the beginning of any unauthorized discharge into the atmosphere of a toxic air pollutant as a result of bypassing an emission control device, when the emission control bypass was not the result of an upset, and the quantity of the unauthorized bypass is greater than or equal to the lower of the Minimum Emission Rate (MER) in LAC 33:III.5112, Table 51.1, or a reportable quantity (RQ) in LAC 33:III.3931, or the quantity of the unauthorized bypass is greater than one pound and there is no MER or RQ for the substance in question. Submit notification in the manner provided in LAC 33:III.3923. [LAC 33:III.5107.B.2]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER19960009
Permit Number: 373-V0
Air - Title V Regular Permit Initial

GRP094 Oxide 2 Unit

- 296 Submit notification. Due to the Office of Environmental Compliance, Emergency and Radiological Services, SPOC, immediately, but in no case later than 24 hours after any unauthorized discharge of a toxic air pollutant into the atmosphere that does not cause an emergency condition, the rate or quantity of which is in excess of that allowed by permit, compliance schedule, or variance, or for upset events that exceed the reportable quantity in LAC 33:I.3931, except as provided in LAC 33:III.5107.B.6. Submit notification in the manner provided in LAC 33:I.3923. [LAC 33:III.5107.B.3]
- 297 Submit written report. Due within seven calendar days of learning of any such discharge or equipment bypass as referred to in LAC 33:III.5107.B.1 through 3. Submit report to the Office of Environmental Compliance by certified mail. Include the information specified in LAC 33:III.5107.B.4.a.i through viii. [LAC 33:III.5107.B.4]
- 298 Report all discharges to the atmosphere of a toxic air pollutant from a safety relief device, a line or vessel rupture, a sudden equipment failure, or a bypass of an emission control device, regardless of quantity, in the annual emissions report and where otherwise specified. Include the identity of the source, the date and time of the discharge, and the approximate total loss during the discharge. [LAC 33:III.5107.B.5]
- 299 Submit to DEQ a compliance plan for achieving compliance with MACT requirements in accordance with LAC 33:III.5109.D. Include the elements listed under LAC 33:III.5109.E. [LAC 33:III.5109.A.1]
- 300 Submit to DEQ a certification of compliance with all MACT requirements, in accordance with LAC 33:III.5109.D. Include the elements listed under LAC 33:III.5109.A.2]
- 301 Submit to DEQ a compliance plan for achieving compliance with the ambient air standard(s), in accordance with LAC 33:III.5109.D. Include the elements listed under LAC 33:III.5109.E. [LAC 33:III.5109.B.1]
- 302 Submit to DEQ a certification of compliance with all ambient air standards, in accordance with LAC 33:III.5109.D. Include the elements listed under LAC 33:III.5109.B.2]
- 303 Achieve compliance with ambient air standards unless it can be demonstrated to the satisfaction of DEQ that compliance with an ambient air standard would be economically infeasible; that emissions could not reasonably be expected to pose a threat to public health or the environment, and that emissions would be controlled to a level that is Maximum Achievable Control Technology. [LAC 33:III.5109.B.3]
- 304 Determine the status of compliance, beyond the property line, with applicable ambient air standards listed in LAC 33:III.5112.Table 51.2. [LAC 33:III.5109.B]
- 305 Develop a standard operating procedure (SOP) within 120 days after achieving or demonstrating compliance with the standards specified in LAC 33:III.Chapter 51. Detail in the SOP all operating procedures or parameters established to ensure that compliance with the applicable standards is maintained and address operating procedures for any monitoring system in place, specifying procedures to ensure compliance with LAC 33:III.5113.C.5. Make a written copy of the SOP available on site or at an alternate approved location for inspection by DEQ. Provide a copy of the SOP within 30 days upon request by the department. [LAC 33:III.5109.C]
- 306 Obtain a Louisiana Air Permit in accordance with LAC 33:III.5111.B and C and in accordance with LAC 33:I.1701, before commencement of the construction of any new source. [LAC 33:III.5111.A.1]
- 307 Obtain a permit modification in accordance with LAC 33:III.5111.B and C before commencement of any modification not specified in a compliance plan submitted under LAC 33:III.5109.D, if the modification will result in an increase in emissions of any toxic air pollutant or will create a new point source. [LAC 33:III.5111.A.2.a]
- 308 Obtain written authorization from DEQ before commencement of any modification specified in a compliance plan submitted pursuant to LAC 33:III.5111.A.3]
- 309 Submit letter. Due to the Office of Environmental Services, Air Permits Division, concurrently with the submittal of the compliance plan. Indicate that the necessary permit modification (or new permit if no existing permit is in place) will be applied for by a date specified in the compliance schedule and request written authorization to construct, or, Submit permit application. Due to the Office of Environmental Services, Permits Division in accordance with LAC 33:III.5111.B, concurrently with the submittal of the compliance plan. [LAC 33:III.5111.A.3]
- 310 Apply for a permit in accordance with LAC 33:III.5111.B, for any existing major source which is operating without a Louisiana Air Permit, or which is not fully permitted, or for any minor source that was once a major source. [LAC 33:III.5111.A.4]
- 311 Do not commence construction or modification of any major source without first obtaining written authorization from DEQ, as specified. [LAC 33:III.5111.A]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER19960009

Permit Number: 373-V0

Air - Title V Regular Permit Initial

GRP094 Oxide 2 Unit

- 312 Submit notification in writing. Due to the Office of Environmental Compliance, Emergency and Radiological Services Division, SPOC, not more than 60 days nor less than 30 days prior to initial start-up. Submit the anticipated date of the initial start-up. [LAC 33:III.5113.B.1.]
- 313 Submit notification in writing. Due to the Office of Environmental Compliance, Emergency and Radiological Services Division, SPOC, within 10 working days after the actual date of initial start-up of the source. Submit the actual date of initial start-up of the source. [LAC 33:III.5113.A.2]
- 314 Ensure that all testing done to determine the emission of toxic air pollutants, upon request by the department, is conducted by qualified personnel. [LAC 33:III.5113.B.1]
- 315 Provide necessary sampling and testing facilities, exclusive of instruments and sensing devices, as needed to properly determine the emission of toxic air pollutants, upon request of the department. [LAC 33:III.5113.B.3]
- 316 Provide emission testing facilities as specified in LAC 33:III.5113.B.4 through e. [LAC 33:III.5113.B.4]
- 317 Analyze samples and determine emissions within 30 days after each emission test has been completed. [LAC 33:III.5113.B.5]
- 318 Submit certified letter. Due to the Office of Environmental Assessment, Air Quality Assessment Division, before the close of business on the 45th day following the completion of the emission test. Report the determinations of the emission test. [LAC 33:III.5113.B.5]
- 319 Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of emissions testing. Retain records of emission test results and other data needed to determine emissions. Retained records at the source, or at an alternate location approved by DEQ for a minimum of two years, and make available upon request for inspection by DEQ. [LAC 33:III.5113.B.3]
- 320 Submit notification. Due to the Office of Environmental Assessment, Air Quality Assessment Division, at least 30 days before the emission test. Submit notification of emission test to allow DEQ the opportunity to have an observer present during the test. [LAC 33:III.5113.B.7]
- 321 Maintain and operate each monitoring system in a manner consistent with good air pollution control practices for minimizing emissions. Repair or adjust any breakdown or malfunction of the monitoring system as soon as practicable after its occurrence. [LAC 33:III.5113.C.1]
- 322 Conduct performance evaluation of the monitoring system when required at any other time requested by DEQ. [LAC 33:III.5113.C.2]
- 323 Submit performance evaluation report. Due to the Office of Environmental Assessment, Air Quality Assessment Division, within 60 days of the monitoring system performance evaluation. [LAC 33:III.5113.C.2]
- 324 Submit notification in writing. Due to the Office of Environmental Assessment, Environmental Technology Division at least 30 days before a performance evaluation of the monitoring system is to begin. [LAC 33:III.5113.C.2]
- 325 Install a monitoring system on each effluent or on the combined effluent, when monitoring is required and the effluents from a single source, or from two or more sources subject to the same emission standards, are combined before being released to the atmosphere. If two or more sources are not subject to the same emission standards, install a separate monitoring system on each effluent, unless otherwise specified. If the applicable standard is a mass emission standard and the effluent from one source is released to the atmosphere through more than one point, install a monitoring system at each emission point unless DEQ approves the installation of fewer systems. [LAC 33:III.5113.C.3]
- 326 Evaluate the performance of continuous monitoring systems, upon request by DEQ, in accordance with the requirements and procedures contained in the applicable performance specification of 40 CFR Part 60, appendix B. [LAC 33:III.5113.C.5.a]
- 327 Submit report. Due to DEQ within 60 days of the performance evaluation of the CMS, if requested. Furnish DEQ with two or more copies of a written report of the test results within 60 days. [LAC 33:III.5113.C.5.a]
- 328 Install all continuous monitoring systems or monitoring devices to make representative measurements under variable process or operating parameters, if required to install a CMS. [LAC 33:III.5113.C.5.d]
- 329 Collect and reduce all data as specified in LAC 33:III.5113.C.5.e.i and ii, if required to install a CMS. [LAC 33:III.5113.C.5.e]
- 330 Submit plant. Due to the Office of Environmental Assessment, Air Quality Assessment Division, within 90 days after DEQ requests either the initial plan or an updated plan, if required by DEQ to install a continuous monitoring system. Submit for approval a plan describing the affected sources and the methods for ensuring compliance with the continuous monitoring system. [LAC 33:III.5113.C.5]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER19960009
Permit Number: 373-V0
Air - Title V Regular Permit Initial

GRP094 Oxide 2 Unit

- 331 Maintain records of monitoring data, monitoring system calibration checks, and the occurrence and duration of any period during which the monitoring system is malfunctioning or inoperative. Maintain these records at the source, or at an alternative location approved by DEQ, for a minimum of three years and make available, upon request, for inspection by DEQ. [LAC 33:III.511.3.C.7]
- 332 An individual or company contracted to perform a demolition or renovation activity which disturbs RACM must be recognized by the Licensing Board for Contractors to perform asbestos abatement, and shall meet the requirements of LAC 33:III.51.51.F.2 and F.3 for each demolition or renovation activity. [LAC 33:III.51.51.F.1.J.1]
- 333 Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 1st of July to the Department of Environmental Quality, Office of Environmental Services, Air Permits Division. Include the information in LAC 33:III.5307.A for the preceding calendar year. [LAC 33:III.5307.B]
- 334 Activate the preplanned abatement strategy listed in LAC 33:III.561.1.Table 5 when the administrative authority declares an Air Pollution Alert. [LAC 33:III.5609.A.1.b]
- 335 Activate the preplanned strategy listed in LAC 33:III.561.1.Table 6 when the administrative authority declares an Air Pollution Warning. [LAC 33:III.5609.A.2.b]
- 336 Activate the preplanned abatement strategy listed in LAC 33:III.561.1.Table 7 when the administrative authority declares an Air Pollution Emergency. [LAC 33:III.5609.A.3.b]
- 337 Prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency. Design standby plans to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33:III.561.1.Tables 5, 6, and 7. [LAC 33:III.5609.A]
- 338 Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency. Design standby plans to reduce or eliminate emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency. Due within 30 days after requested by the administrative authority. [LAC 33:III.561.1.A]
- 339 During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by the department to enforce these regulations. [LAC 33:III.561.1.B]
- 340 Comply with the provisions in 40 CFR 68, except as specified in LAC 33:III.5901. [LAC 33:III.5901.A]
- 341 Identify hazards that may result from accidental releases of the substances listed in 40 CFR 68.130, Table 59.0 of LAC 33:III.5907, or Table 59.1 of LAC 33:III.591.3 using appropriate hazard assessment techniques, design and maintain a safe facility, and minimize the off-site consequences of accidental releases of such substances that do occur. [LAC 33:III.5907]
- 342 Submit amended registration: Due to the Department of Environmental Quality, Office of Environmental Compliance, Emergency and Radiological Services Division, within 60 days after the information in the submitted registration is no longer accurate. [LAC 33:III.591.1.C]
- 343 Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 31st of March for the period January 1 to December 31 of the previous year unless otherwise directed. Submit emission inventory data in the format specified by the Office of Environmental Assessment, Air Quality Assessment Division. Include all data applicable to the emissions source(s), as specified in LAC 33:III.919.A-D. [LAC 33:III.919.D]
- 344 All affected facilities shall comply with all applicable provisions in 40 CFR 63 Subpart A. [40 CFR 63]
- 345 Submit Title V permit application for renewal: Due 180 calendar days before permit expiration date. [40 CFR 70.5(a)(1)(iii)]
- 346 Submit Title V monitoring results report: Due semiannually, by March 31st and September 30th for the preceding periods encompassing July through December and January through June, respectively. Submit reports to the Office of Environmental Compliance, Surveillance Division. Certify reports by a responsible company official. Clearly identify all instances of deviations from permitted monitoring requirements. For previously reported deviations, in lieu of attaching the individual deviation reports, clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. [40 CFR 70.6(a)(3)(iii)(A)]
- 347 Submit Title V excess emissions report: Due quarterly, by June 30, September 30, December 31, March 31. Submit reports of all permit deviations to the Office of Environmental Compliance, Surveillance Division. Certify all reports by a responsible official in accordance with 40 CFR 70.5(d). The reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by 40 CFR 70.6(a)(3)(iii)(A) as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. [40 CFR 70.6(a)(3)(iii)(B)]
- 348 Submit Title V compliance certification: Due annually, by the 31st of March. Submit to the Office of Environmental Compliance, Surveillance Division. [40 CFR 70.6(c)(5)(v)]
- 349 Comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B. [40 CFR 82. Subpart F]

SPECIFIC REQUIREMENTS

AJ ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER19960009
Permit Number: 373-VQ
Air - Title V Regular Permit Initial

RLP018 51-Fresh Blowdown Vent

350 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
The emissions from 1st blowdown (depressurizing of Oxide II Reaction) are routed to the Oxide II 10" Flare, Emission Point 60E. Determined as MACT. [LAC 33:III.5109.A]

RLP019 52-Blowoff Blowdown Vent

351 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
The emissions from 1st blowdown (depressurizing of Oxide II Reaction) are routed to the Oxide II 10" Flare, Emission Point 60E. Determined as MACT. [LAC 33:III.5109.A]

RLP020 53- H-808 Vent (Mono Glycol Column Steam Jet)

352 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Source emits Class I TAP Ethylene Oxide and Class II TAP Acetaldehyde and 1,4 Dioxane. Compliance with 40 CFR 63 Subpart G Group 2 regulations determined as MACT. [LAC 33:III.5109.A]

353 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]

Which Months: All Year Statistical Basis: None specified

354 The owner or operator of a Group 2 process vent with a TRE index value greater than 4.0 shall maintain a TRE index value greater than 4.0, comply with the provisions for calculations of a TRE index value in 40 CFR 63.115 and the reporting and recordkeeping provisions in 40 CFR 63.117(b) and 63.118(c) and (h), and is not subject to monitoring or any other provisions of 40 CFR 63.114 through 63.118. [40 CFR 63.113(e)]

355 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(c)]

356 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

357 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

358 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

359 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

360 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a flow rate less than 0.005 standard cubic meter per minute to become a Group 2 process vent with a flow rate of 0.005 scmm or greater and a TRE index value less than or equal to 4.0. Include the information specified in 40 CFR 63.118(i)(1) through (i)(3). Subpart G. [40 CFR 63.118(i)]

361 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with an organic HAP concentration less than 50 ppmv to become a Group 2 process vent with an organic HAP concentration of 50 ppmv or greater and a TRE index value less than or equal to 4.0. Include the information specified in 40 CFR 63.118(j)(1) through (j)(3). Subpart G. [40 CFR 63.118(j)]

RLP021 54- H-807 Vent (Final Concentrator Column Steam Jet)

362 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Source emits Class I TAP Ethylene Oxide and Class II TAP Acetaldehyde and 1,4 Dioxane. Compliance with 40 CFR 63 Subpart G Group 2 regulations determined as MACT. [LAC 33:III.5109.A]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER19960009

Permit Number: 373-V0

Air - Title V Regular Permit Initial

RLP021 54- H-807 Vent (Final Concentrator Column Steam Jet)

363 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]

Which Months: All Year Statistical Basis: None specified

364 The owner or operator of a Group 2 process vent with a TRE index value greater than 4.0 shall maintain a TRE index value greater than 4.0, comply with the provisions for calculations of a TRE index value in 40 CFR 63.115 and the reporting and recordkeeping provisions in 40 CFR 63.117(b) and 63.118(c) and (h), and is not subject to monitoring or any other provisions of 40 CFR 63.114 through 63.118. [40 CFR 63.113(e)]

365 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

366 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessment, as specified in 40 CFR 63.115(d)(1).

Subpart G. [40 CFR 63.117(b)]

367 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

368 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 1 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

369 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

370 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a flow rate less than 0.005 standard cubic meter per minute to become a Group 2 process vent with a flow rate of 0.005 scmm or greater and a TRE index value less than or equal to 4.0. Include the information specified in 40 CFR 63.118(i)(1) through (i)(3). Subpart G. [40 CFR 63.118(i)]

371 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with an organic HAP concentration less than 50 ppmv to become a Group 2 process vent with an organic HAP concentration of 50 ppmv or greater and a TRE index value less than or equal to 4.0. Include the information specified in 40 CFR 63.118(j)(1) through (j)(3). Subpart G. [40 CFR 63.118(j)]

RLP022 55- H-1005 Vent (Diglycol Forecolumn Steam Jet)

372 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.

Source emits Class I TAP Ethylene Oxide and Class II TAPs Acetaldehyde and 1,4 Dioxane. Compliance with 40 CFR 63 Subpart G Group 2 regulations determined as MACT. [LAC 33:II.51.09.A]

373 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]

Which Months: All Year Statistical Basis: None specified

374 The owner or operator of a Group 2 process vent with a TRE index value greater than 4.0 shall maintain a TRE index value greater than 4.0, comply with the provisions for calculations of a TRE index value in 40 CFR 63.115 and the reporting and recordkeeping provisions in 40 CFR 63.117(b) and 63.118(c) and (h), and is not subject to monitoring or any other provisions of 40 CFR 63.114 through 63.118. [40 CFR 63.113(e)]

375 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

376 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessment, as specified in 40 CFR 63.115(d)(1).

Subpart G. [40 CFR 63.117(b)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER19960009

Permit Number: 373.v0

Air - Title V Regular Permit Initial

RLP022 55- H-1005 Vent (Diglycol Column Steam Jet)

377 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

378 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

379 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

380 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a flow rate less than 0.005 standard cubic meter per minute to become a Group 2 process vent with a flow rate of 0.005 scmm or greater and a TRE index value less than or equal to 4.0. Include the information specified in 40 CFR 63.118(i)(1) through (i)(3). Subpart G. [40 CFR 63.118(i)]

381 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with an organic HAP concentration less than 50 ppmv to become a Group 2 process vent with an organic HAP concentration of 50 ppmv or greater and a TRE index value less than or equal to 4.0. Include the information specified in 40 CFR 63.118(j)(1) through (j)(3). Subpart G. [40 CFR 63.118(j)]

RLP023 56- H-1021 Vent (Diglycol Column Steam Jet)

382 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ. Source emits Class I TAP Ethylene Oxide and Class II TAPs Acetaldehyde and 1,4 Dioxane. Compliance with 40 CFR 63 Subpart G Group 2 regulations determined as MACT. [LAC 33:III.51.09.A]

383 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
Which Months: All Year Statistical Basis: None specified

384 The owner or operator of a Group 2 process vent with a TRE index value greater than 4.0 shall maintain a TRE index value greater than 4.0, comply with the provisions for calculations of a TRE index value in 40 CFR 63.115 and the reporting and recordkeeping provisions in 40 CFR 63.117(b) and 63.118(c) and (h), and is not subject to monitoring or any other provisions of 40 CFR 63.114 through 63.118. [40 CFR 63.113(e)]

385 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

386 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

387 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

388 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

389 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

390 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a flow rate less than 0.005 standard cubic meter per minute to become a Group 2 process vent with a flow rate of 0.005 scmm or greater and a TRE index value less than or equal to 4.0. Include the information specified in 40 CFR 63.118(i)(1) through (i)(3). Subpart G. [40 CFR 63.118(i)]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER19960009
Permit Number: 373-V0

Air - Title V Regular Permit Initial

RLP023 56- H-1021 Vent (Diglycol Column Steam Jet)

391 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with an organic HAP concentration less than 50 ppmv to become a Group 2 process vent with an organic HAP concentration of 50 ppmv or greater and a TRE index value less than or equal to 4.0. Include the information specified in 40 CFR 63.118(j)(1) through (j)(3). Subpart G. [40 CFR 63.118(j)]

RLP024 57- H-835 Vent (Preconcentrator Steam Jet)

392 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Source emits Class I TAP Ethylene Oxide and Class II TAPs Acetaldehyde and 1,4 Dioxane. Compliance with 40 CFR 63 Subpart G Group 2 regulations determined as MACT. [LAC 33:III.5109.A]

393 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]

Which Months: All Year Statistical Basis: None Specified

394 The owner or operator of a Group 2 process vent with a TRE index value greater than 4.0 shall maintain a TRE index value greater than 4.0, comply with the provisions for calculations of a TRE index value in 40 CFR 63.115 and the reporting and recordkeeping provisions in 40 CFR 63.117(b) and 63.118(c) and (h), and is not subject to monitoring or any other provisions of 40 CFR 63.114 through 63.118. [40 CFR 63.113(e)]

395 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]

396 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1). Subpart G. [40 CFR 63.117(b)]

397 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculation of the TRE index value pursuant to 40 CFR 63.115(e). Subpart G. [40 CFR 63.118(c)]

398 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]

399 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0. Include the information specified in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]

400 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a flow rate less than 0.005 standard cubic meter per minute to become a Group 2 process vent with a flow rate of 0.005 scmm or greater and a TRE index value less than or equal to 4.0. Include the information specified in 40 CFR 63.118(i)(1) through (i)(3). Subpart G. [40 CFR 63.118(i)]

401 Submit report: Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with an organic HAP concentration less than 50 ppmv to become a Group 2 process vent with an organic HAP concentration of 50 ppmv or greater and a TRE index value less than or equal to 4.0. Include the information specified in 40 CFR 63.118(j)(1) through (j)(3). Subpart G. [40 CFR 63.118(j)]

RLP025 57A- G-455 Feedline & Vent

402 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
This emission point emits during periods of start up. Emissions controlled by Flare 60F. Determined as MACT. [LAC 33:III.5109.A]

RLP026 60B- Stripping Still & Hogging Jet (H-407 Vent)

403 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
This emission point emits during periods of start up. Emissions routed to Flare 60 F. Determined as MACT. [LAC 33:III.5109.A]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER19960009
Permit Number: 373.V0
Air - Title V Regular Permit Initial

RLP027 60C-Analyzer Cell Vent No. 2

404 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class I or II TAPs emitted. No controls required for MACT. [LAC 33:III.5109.A]

RLP028 60G-Fast Purge Analyzer Header No. 2

405 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Class I or II TAPs emitted. No controls required for MACT. [LAC 33:III.5109.A]

RLP029 60H-Jet Condensate Pot

- 406 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Vent emits Class I TAP Ethylene Oxide and Class II TAPs Acetaldehyde, and ,4-Dioxane. Compliance with Group 2 SOCM/HON determined as MACT. [LAC 33:III.5109.A]
- 407 TRE index value > 4.0 (no units). Subpart G. [40 CFR 63.113(e)]
Which Months: All Year Statistical Basis: None specified
- 408 The owner or operator of a Group 2 process vent with a TRE index value greater than 4.0 shall maintain a TRE index value greater than 4.0, comply with the provisions for calculations of a TRE index value in 40 CFR 63.115 and the reporting and recordkeeping provisions in 40 CFR 63.117(b) and 63.118(c) and (h), and is not subject to monitoring or any other provisions of 40 CFR 63.114 through 63.118. [40 CFR 63.113(e)]
- 409 Recalculate the TRE index value, flow, or organic hazardous air pollutants concentration for each process vent, as necessary to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Subpart G. [40 CFR 63.115(e)]
- 410 Equipment/operational data recordkeeping by electronic or hard copy continuously. Maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream. Include all data, assumptions and procedures used for the engineering assessments, as specified in 40 CFR 63.115(d)(1).
- Subpart G. [40 CFR 63.117(b)]
- 411 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of any process changes as defined in 40 CFR 63.115(e), and any recalculations of the TRE index value pursuant to 40 CFR 63.115(c). Subpart G. [40 CFR 63.118(c)]
- 412 Submit report Due within 180 calendar days after a process change, as defined in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.118(g)]
- 413 Submit report Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent. Include the information specified in 40 CFR 63.118(g)(1) through (g)(3). Subpart G. [40 CFR 63.115(e)]
- 414 Submit report Due within 180 calendar days after a process change, as defined in 40 CFR 63.118(h)(1) through (h)(3). Subpart G. [40 CFR 63.118(h)]
- 415 Submit report Due within 180 calendar days after a process change, as defined in 40 CFR 63.115(e), is made that causes a Group 2 process vent with a flow rate less than 0.005 standard cubic meter per minute to become a Group 2 process vent with a flow rate of 0.005 scmm or greater and a TRE index value less than or equal to 4.0. Include the information specified in 40 CFR 63.118(i)(1) through (i)(3). Subpart G. [40 CFR 63.118(i)]
- 416 Equipment/operational data recordkeeping by electronic or hard copy as needed. Maintain records to demonstrate that the criteria are being met for any exemption claimed. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request. [LAC 33:III.2115.K]
- 417 Throughput recordkeeping by electronic or hard copy daily. Keep records of the actual throughput per day and the glycol circulation rate. [LAC 33:III.2116.F.4.b]

RLP030 2300-Evaporator Vent

- 416 Equipment/operational data recordkeeping by electronic or hard copy as needed. Maintain records to demonstrate that the criteria are being met for any exemption claimed. Maintain records on the premises for at least two years and make such information available to representatives of the Louisiana Department of Environmental Quality and the Environmental Protection Agency upon request. [LAC 33:III.2115.K]
- 417 Throughput recordkeeping by electronic or hard copy daily. Keep records of the actual throughput per day and the glycol circulation rate. [LAC 33:III.2116.F.4.b]

SPECIFIC REQUIREMENTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER19960009

Permit Number: 373-V0

Air - Title V Regular Permit Initial

RLP030 2300-Evaporator Vent

418 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Stack emits Acetaldehyde and 1,4-Dioxane, Class II TAPs; Ethylene Oxide and Formaldehyde, Class I TAPs. Compliance with LAC 33.111 Chapter 21 recordkeeping determined as MACT. [LAC 33.111.5109. A]

RLP031 2301-System Pressure Vent

419 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
The emissions from 1 st blowdown (depressurizing of Oxide II Reaction) are routed to the Oxide II 10" Flare, Emission Point 60E. Determined as MACT. [LAC 33.111.5109. A]

RLP036 60F-2-Evaporator Vent Condenser

- 420 Reduce emissions of organic HAP using a flare. Do not vent halogenated vent streams to a flare. Subpart G. [40 CFR 63.111(3)(a)(1)]
421 Bypass lines: Flow monitored by flow indicator once every 15 minutes. Equip the flow indicator with a recorder that takes a reading at least once every 15 minutes and install at the entrance to any bypass line that could divert the gas stream to the atmosphere. Subpart G. [40 CFR 63.114(d)(1)]
Which Months: All Year Statistical Basis: None specified
422 Bypass lines: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.111(4)(2)]
423 Bypass lines: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]
Which Months: All Year Statistical Basis: None specified
424 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.111(7(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.111(7(a)]

RLP037 B3-Scrubber Vent (Recovery Device)

- 425 Control emissions of toxic air pollutants to a degree that constitutes Maximum Achievable Control Technology (MACT) as approved by DEQ.
Compliance with SOCM1 HON Group 1 Process vent determined as MACT. [LAC 33.111.5109. A]
426 Organic HAP $\geq 98\%$ reduction by weight, or ≤ 20 ppmv, whichever is less stringent, as determined using the methods in 40 CFR 63.111(6)(c) Subpart G
The B3-Scrubber Vent vapor stream is routed to the BOU (98% efficiency) and then to the IGT. [40 CFR 63.111(3)(a)(2)]
Which Months: All Year Statistical Basis: None specified
427 Bypass lines: Flow monitored by flow indicator once every 15 minutes. Equip the flow indicator with a recorder that takes a reading at least once every 15 minutes and install at the entrance to any bypass line that could divert the gas stream to the atmosphere. Subpart G. [40 CFR 63.114(d)(1)]
Which Months: All Year Statistical Basis: None specified
428 Bypass lines: Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Subpart G. [40 CFR 63.111(4)(2)]
429 Bypass lines: Seal or closure mechanism monitored by visual inspection/determination monthly to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line. Subpart G. [40 CFR 63.114(d)(2)]
Which Months: All Year Statistical Basis: None specified
430 Equipment/operational data recordkeeping by electronic or hard copy continuously. Keep up-to-date, readily accessible records of the data specified in 40 CFR 63.111(7(a)(4) through (a)(8), as applicable. Subpart G. [40 CFR 63.111(7(a)]

General Information

AI ID: 2083 Union Carbide Corp - St Charles Operations
Activity Number: PER19960009
Permit Number: 373-V0
Air - Title V Regular Permit Initial

Also Known As:	ID	Name	User Group	Start Date
	2520-00001	Union Carbide Corp - Taft Star Plant	CDS Number	08-05-2002
	2520-0001	Union Carbide Corp - Taft Star Plant	Emission Inventory	03-03-2004
	13-1421730	Federal Tax ID	Federal Tax ID	11-21-1999
LAD041581422		Union Carbide Corp SCO Taft/Star	Hazardous Waste Notification	08-18-1980
PMTPC		GPR A Baselines	Hazardous Waste Permitting	10-01-1997
LAD041581422		Union Carbide	Inactive & Abandoned Sites	06-08-1981
LA00000191		WPC File Number	LPDES Permit #	05-22-2003
LAR10C313		LPDES #	LPDES Permit #	12-12-2004
LAR10C447		LPDES #	LPDES Permit #	12-12-2004
LA-2163-L01		Radioactive Material License	Radiation License Number	07-06-2001
2163		X-Ray Registration Number	Radiation X-ray Registration Number	11-21-1999
GD-089-1324		Site ID #	Solid Waste Facility No.	04-30-2001
17809		Union Carbide Chemicals & Plastics	TEMPO Merge	10-17-2001
19135		Dow Union Carbide - St Charles Operations	TEMPO Merge	06-30-2002
34610		Union Carbide Corp - Hahnville Plant	TEMPO Merge	10-17-2001
35033		Union Carbide Corp - Star Plant	TEMPO Merge	07-15-2001
3832		Union Carbide Corp	TEMPO Merge	11-01-2000
38779		Union Carbide Corp	TEMPO Merge	07-15-2001
38780		Union Carbide Corp	TEMPO Merge	07-15-2001
38882		Union Carbide Corp	TEMPO Merge	07-15-2001
44903		Union Carbide Corp Taft Plant	TEMPO Merge	07-22-2001
45881		Union Carbide Chemical & Plastics	TEMPO Merge	07-22-2001
8533		Union Carbide	TEMPO Merge	09-05-2001
89428		Dow Chemical	TEMPO Merge	11-07-2001
9651		Union Carbide Star	TEMPO Merge	10-17-2001
2520-0001		Toxic Emissions Data Inventory #	Toxic Emissions Data Inventory #	01-01-1991
70057NNCRBHWY31		TRI #	Toxic Release Inventory	07-30-2004
45011610		UST Facility ID (from UST legacy data)	Underground Storage Tanks	10-12-2002
			Main Phone:	9837834411

Physical Location:

PO Box 50
 Taft, LA 70057
 355 Hwy 3142 Gate 28
 Hahnville, LA 700570050

Mailing Address:

PO Box 50
 Hahnville, LA 70057

General Information

AJ ID: 2083 Union Carbide Corp - St Charles Operations
Activity Number: PER19960009

Permit Number: 373-V0

Air - Title V Regular Permit Initial

Related People:	Name	Mailing Address	Phone (Type)	Relationship
	Deb Beck	PO Box 50 Hahnville, LA 700570050	9856333446 (WP)	Air Permit Contact For Katrina Response Contact for Responsible Official for
	Barry Minnich	PO Box 50 Hahnville, LA 700570050		
	Fernando Signorino			
Related Organizations:	Name	Address	Phone (Type)	Relationship
	Union Carbide Corp	PO Box 50 Hahnville, LA 700570050		Owns
	Union Carbide Corp	PO Box 50 Hahnville, LA 700570050		Operates
	Union Carbide Corp	PO Box 50 Hahnville, LA 700570050		Accident Prevention Billing Party for Solid Waste Billing Party for
	Union Carbide Corp	PO Box 50 Hahnville, LA 700570050		Air Billing Party for Radiation Registration Billing Party for
	Union Carbide Corp	PO Box 50 Hahnville, LA 700570050		Radiation License Billing Party for
	Union Carbide Corp	PO Box 50 Hahnville, LA 700570050		Water Billing Party for UST Billing Party for
	Union Carbide Corp	PO Box 50 Hahnville, LA 700570050		
	SIC Codes:	2869, Industrial organic chemicals, nec		

Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may contact Mr. David Ferrand, Environmental Assistance Division, at (225) 219-3247 or email your changes to facupdate@la.gov.

INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
Activity Number: PER19960009
Permit Number: 373-V0
Air - Title V Regular Permit Initial

Subject Item Inventory:

ID	Description	Tank Volume	Max Operating Rate	Normal Operating Rate	Contents	Operating Time
EQT312	60F .. Oxide 2 Unit Flare	-	-	-	-	8760 hr/yr (All Year)
EQT465	41A-Tank 3558	30000 gallons	2700 gallons/hr	14.14 MM gallons/yr	Ethyene Glycol	8760 hr/yr (All Year)
EQT466	42A-Tank 3560	30000 gallons	2700 gallons/hr	14.14 MM gallons/yr	Ethyene Glycol	8760 hr/yr (All Year)
EQT467	43A-Tank 3357	30000 gallons	2800 gallons/hr	13.84 MM gallons/yr	Diethylene Glycol	8760 hr/yr (All Year)
EQT468	44A-Tank 3359	30000 gallons	2800 gallons/hr	13.84 MM gallons/yr	Diethylene Glycol	8760 hr/yr (All Year)
EQT469	46A-Tank 3361	10000 gallons	2100 gallons/hr	11.3 MM gallons/yr	Mono Glycol Still Tails	8760 hr/yr (All Year)
EQT470	58-Tank C-301 TetraIn Surge Tank	26000 gallons	2700 gallons/hr	123419 gallons/yr	TetraIn	8760 hr/yr (All Year)
EQT471	58B-Tank C-317 TetraIn Collection Pot	110000 gallons	1826 gallons/hr	123419 gallons/yr	TetraIn	8760 hr/yr (All Year)
EQT472	50-Waste Heat Boiler (F-603 Vent)	469 MM BTU/hr	332 MM BTU/hr	-	-	8760 hr/yr (All Year)
EQT473	50A-Waste Heat Boiler Lubrication	-	-	-	-	864 hr/yr (All Year)
EQT474	58A-TetraIn Heater	-	-	-	-	8760 hr/yr (All Year)
EQT475	60E-Oxide Flare (10")	-	-	-	-	(None Specified)
EQT477	Tank C-311 (EDC)	-	-	-	-	8760 hr/yr (All Year)
EQT618	BOU-1 Blowoff Oxidation Unit	-	-	-	-	(None Specified)
EQT619	IGT-1 Industrial Gas Turbine	-	-	-	-	(None Specified)
EQT620	Cooler (80% efficient)	-	-	-	-	(None Specified)
EQT622	Process Wastewater Streams	-	-	-	-	8760 hr/yr (All Year)
EQT623	B1-B3 Oxide Reaction System Reactors	-	-	-	-	(None Specified)
EQT624	PCT-1 PC Tail Reactor (Oxide Refining System)	-	-	-	-	(None Specified)
EQT625	Glycol Reaction System Reactors	-	-	-	-	(None Specified)
EQT626	C1-C3 - Oxide 2 Refining Destillation Unit (Purifying, Exhaust & Redisillation Columns)	-	-	-	-	(None Specified)
FUG009	196-J-Fugitive Emissions	-	-	-	-	-
RIP018	51-Fresh Blowdown Vent	-	-	-	-	8760 hr/yr (All Year)
RLP019	52-Blowoff Blowdown Vent	-	-	-	-	12 hr/yr (All Year)
RLP020	53-H-808 Vent (Mono Glycol Column Steam Jet)	-	-	-	-	8760 hr/yr (All Year)
RLP021	54-H-807 Vent (Final Concentrator Column Steam Jet)	-	-	-	-	8760 hr/yr (All Year)
RLP022	55-H-1005 Vent (Diglycol Forecolumn Steam Jet)	-	-	-	-	8760 hr/yr (All Year)
RLP023	56-H-1021 Vent (Diglycol Column Steam Jet)	-	-	-	-	8760 hr/yr (All Year)
RLP024	57-H-835 Vent (Preconcentrator Steam Jet)	-	-	-	-	8760 hr/yr (All Year)
RLP025	57A-G-455 Feedline & Vent	-	-	-	-	240 hr/yr (All Year)
RLP026	60B-Striping Still & Hogging Jet (H-407 Vent)	-	-	-	-	240 hr/yr (All Year)
RLP027	60C-Analyzer Cell Vent No. 2	-	-	-	-	8760 hr/yr (All Year)
RLP028	60G-FastPurge Analyzer Header No. 2	-	-	-	-	48 hr/yr (All Year)
RLP029	60H-Jet Condensate Pot	-	-	-	-	8760 hr/yr (All Year)
RLP030	2300-Evaporator Vent	-	-	-	-	13 hr/yr (All Year)
RLP031	2301-System Pressure Vent	-	-	-	-	12 hr/yr (All Year)

INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER19960009

Permit Number: 373-V0

Air - Title V Regular Permit Initial

Subject Item Inventory

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
RLP036	60F2-Evaporator Vent (Condenser)					(None Specified)
RLP037	B3-Scrubber Vent (Recovery Device)					8760 hr/yr (All Year)

Subject Item Groups:

ID	Description	Included Components (from Above)
GRP094	Oxide 2 Unit	EQT312 60E-Oxide 2 Unit Flare
GRP094	Oxide 2 Unit	EQT465 41A-Tank 3358
GRP094	Oxide 2 Unit	EQT466 42A-Tank 3360
GRP094	Oxide 2 Unit	EQT467 43A-Tank 3357
GRP094	Oxide 2 Unit	EQT468 44A-Tank 3359
GRP094	Oxide 2 Unit	EQT469 46A-Tank 3361
GRP094	Oxide 2 Unit	EQT470 58-Tank C-301 Tetrafin Surge Tank
GRP094	Oxide 2 Unit	EQT471 58B-Tank C-317 Tetrafin Collection Pot
GRP094	Oxide 2 Unit	EQT472 50-Wastia Heat Boiler (F-603 Vent)
GRP094	Oxide 2 Unit	EQT473 50A-Waste Heat Boiler Lubrication
GRP094	Oxide 2 Unit	EQT474 58A-Tetrafin Heater
GRP094	Oxide 2 Unit	EQT475 60E-Oxide Flare (1'0")
GRP094	Oxide 2 Unit	EQT477 Tank C-311 (EDC)
GRP094	Oxide 2 Unit	EQT618 BOU-1 Blowoff Oxidation Unit
GRP094	Oxide 2 Unit	EQT619 IGT-1 Industrial Gas Turbine
GRP094	Oxide 2 Unit	EQT620 Cooler (80% efficient)
GRP094	Oxide 2 Unit	EQT622 Process Wastewater Streams
GRP094	Oxide 2 Unit	EQT623 B1-B3 Oxide Reaction System Reactors
GRP094	Oxide 2 Unit	EQT624 PC Tails Reactor (Oxide Refining System)
GRP094	Oxide 2 Unit	EQT625 Glycol Reaction System Reactors
GRP094	Oxide 2 Unit	EQT626 C1-C3 - Oxide 2 Refining Destillation Columns
GRP094	Oxide 2 Unit	FUG9 196J-Effigite Emissions
GRP094	Oxide 2 Unit	RLP18 51-Fresh Blowdown Vent
GRP094	Oxide 2 Unit	RLP19 52-Blowoff Blowdown Vent
GRP094	Oxide 2 Unit	RLP20 53-H-808 Vent (Mono Glycol Column Steam Jet)
GRP094	Oxide 2 Unit	RLP21 54-H-807 Vent (Final Concentrator Column Steam Jet)
GRP094	Oxide 2 Unit	RLP22 55-H-1005 Vent (Diglycol Forecolumn Steam Jet)
GRP094	Oxide 2 Unit	RLP23 56-H-1021 Vent (Diglycol Column Steam Jet)
GRP094	Oxide 2 Unit	RLP24 57-H-835 Vent (Preconcentrator Steam Jet)
GRP094	Oxide 2 Unit	RLP25 57A-G-435 Feedline & Vent
GRP094	Oxide 2 Unit	RLP26 60B- Stripping Still & Hogging Jet (H-407 Vent)

INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER19960009
 Permit Number: 373-V0
 Air - Title V Regular Permit Initial

Subject Item Groups:

ID	Description	Included Components (from Above)
GRP094	Oxide 2 Unit	RLP27 60G-F Analyzer Cell Vent No. 2
GRP094	Oxide 2 Unit	RLP28 60H-Fast Purge Analyzer Header No. 2
GRP094	Oxide 2 Unit	RLP29 60H-Jet Condensate Pot
GRP094	Oxide 2 Unit	RLP30 2300-Evaporator Vent
GRP094	Oxide 2 Unit	RLP31 2301-System Pressure Vent
GRP094	Oxide 2 Unit	RLP36 60F2-Evaporator Vent Condenser
GRP094	Oxide 2 Unit	RLP37 B3-Scrubber Vent (Recovery Device)

Relationships:

Subject Item	Relationship	Subject Item
EQT312 60F -- Oxide 2 Unit Flare	Controls emissions from	RLP25 57A-G-435 Feedline & Vent
EQT312 60F -- Oxide 2 Unit Flare	Controls emissions from	RLP26 60B-Stripping Still & Hoggning Jet (H-407 Vent)
EQT312 60F -- Oxide 2 Unit Flare	Controls emissions from	RLP36 60F2-Evaporator Vent Condenser
EQT312 60F -- Oxide 2 Unit Flare	Controls emissions from	EQT477 Tank C-311 (EDC)
EQT475 58-Tank C-301 Tetralin Surge Tank	Controlled by	EQT620 Cooler (80% efficient)
EQT475 60E-Oxide Flare (10')	Controls emissions from, (1st Blow down)	RLP18 51-Fresh Blowdown Vent
EQT475 60E-Oxide Flare (10')	Controls emissions from	RLP19 52-Blowoff Blowdown Vent
EQT475 60E-Oxide Flare (10')	Controls emissions from	RLP31 2301-System Pressure Vent
EQT618 BOU-1 Blowoff Oxidation Unit	Vents to	EQT619 IG-T-1 Industrial Gas Turbine
EQT619 IG-T-1 Industrial Gas Turbine	Vents to	EOT472 50-Waste Heat Boiler (F-603 Vent)
RLP37 B3-Scrubber Vent (Recovery Device)	Controlled by	EQT618 BOU-1 Blowoff Oxidation Unit

Stack Information:

ID	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
EQT465 41A-Tank 3358			.25		.45	68
EQT466 42A-Tank 3360			.25		.42	68
EQT467 43A-Tank 3357			.25		.42	68
EQT468 44A-Tank 3359			.25		.45	68
EQT469 46A-Tank 3361			.25		.32	280
EQT470 58-Tank C-301 Tetralin Surge Tank			.08		.60	77
EQT471 58B-Tank C-317 Tetralin Collection Pot			1.5		.40	77
EQT472 50-Waste Heat Boiler (F-603 Vent)	161	261000	.5		.68	290
EQT473 50A-Waste Heat Boiler Lubrication	17	200			.68	140
EQT474 58A-Tetralin Heater						
EQT475 60E-Oxide Flare (10')	14	19800	5.5		.72	700
RLP018 51-Fresh Blowdown Vent	76.9	2496	.83		.40	2000
RLP019 52-Blowoff Blowdown Vent	1	78			.30	560
RLP020 53-H-808 Vent (Mono Glycol Column Steam Jet)	2.6	210			.20	150
	4.8	3.3	.12		.45	86

INVENTORIES

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER19960009

Permit Number: 373-V0

Air - Title V Regular Permit Initial

Stack Information:

ID	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
RLP021 54-H-807 Vent (Final Concentrator Column Steam Jet)	.48	.32	.12	-	55	80
RLP022 55-H-1005 Vent (Diglycol Forecolumn Steam Jet)	8.9	6.1	.12	-	50	80
RLP023 56-H-1021 Vent (Diglycol Column Steam Jet)	1.4	1	.13	-	70	82
RLP024 57-H-835 Vent (P Reconcentrator Steam Jet)	1.4	1.9	.13	-	45	83
RLP025 57A-G-455 Feedline & Vent	32.5	23.9	.13	-	70	212
RLP026 60B- Stripping Still & Hoggling Jet (H-407 Vent)	3.3	1	.08	-	60	212
RLP027 60C-Analyzer Cell Vent No. 2	30.9	91	.25	-	20	78
RLP028 60G-Fast Purge Analyzer Header No. 2	.38	1.1	.25	-	55	100
RLP029 60H-Jet Condensate Pot			.17	-	15	171
RLP030 2300-Evaporator Vent			.35	-	35	-

Fee Information:

Sub Item Id	Multiplier	Units Of Measure	Fee Desc
GRP094	1	MM Lb/Yr	0630 - Organic Oxides, Alcohols, Glycols (Rated Capacity)

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER19960009

Permit Number: 373-V0

Air - Title V Regular Permit Initial

All phases

Subject Item	PM ₁₀		SO ₂		NOx		CO		VOC		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr
EQT 312	0.003	0.003	0.01 < 0.001	0.01 < 0.001	0.08	0.08	0.34	0.43	1.88	0.04	0.04
60F										< 0.01	< 0.02
EQT 465										< 0.01	< 0.01
41A										< 0.01	< 0.01
EQT 466										< 0.01	< 0.01
42A										< 0.001 < 0.001	< 0.01
EQT 467										< 0.001 < 0.001	< 0.01
43A										< 0.001 < 0.001	< 0.01
EQT 468										< 0.001 < 0.001	< 0.01
44A										< 0.001 < 0.001	< 0.01
EQT 469										< 0.40	< 3.34
46A										< 0.43	< 82.38
EQT 470										< 0.001	< 0.01
58										< 0.001	< 0.01
EQT 471										< 0.001	< 0.01
58B										< 0.001	< 0.01
EQT 472	- 2.19	3.10	9.58	- 1.13	1.60	4.94	106.08	150.14	464.63	27.18	38.47
50										< 19.06	< 14.94
EQT 474	0.63	0.63	0.27	0.05	0.05	0.02	8.30	8.30	3.59	6.97	6.97
58A										< 3.01	< 0.46
EQT 475	0.08	0.08	0.35 < 0.001	< 0.001	< 0.01	1.91	1.91	8.35	10.38	45.46	0.82
60E										< 51.50	< 3.60
FUG 009	- 196J									< 2.66	< 11.65
RLP 020										< 0.27	< 0.54
53										< 0.14	< 1.19
RLP 021										< 0.03	< 0.06
54										< 0.12	< 0.001 < 0.01
RLP 022										< 0.004	< 0.01
55										< 0.02	< 0.04
RLP 023										< 0.004	< 0.01
56										< 0.002	< 0.004
RLP 024										< 0.06	< 0.01
57										< 0.06	< 0.26
RLP 027										< 0.06	< 0.01
60C										< 0.06	< 0.01

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER19960009

Permit Number: 373-YO

Air - Title V Regular Permit Initial

All phases

Subject Item	PM ₁₀		SO ₂		NOx		CO		VOC	
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Avg lb/hr	Max lb/hr
RLP 028 60G									23.69	23.69
RLP 029 60H									< 0.001	< 0.001
RLP 030 2300									230.70	380.34
										2.64

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals

Permit Phase Totals:

PM10: 10.21 tons/yr
 SO2: 4.96 tons/yr
 NOx 476.91 tons/yr
 CO: 170.07 tons/yr
 VOC: 89.48 tons/yr

Emission rates Notes:

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER19960009

Permit Number: 373-V0

Air - Title V Regular Permit Initial

All phases

Subject Item	1,2-Dichloroethane			1,4-Dioxane			Acetaldehyde			Acrolein			Chloroethane		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 312	< 0.001	< 0.001	-	< 0.01	< 0.01	-	0.02	0.02	-	0.09	0.09	-	< 0.01	< 0.01	-
60F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EQT 465	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EQT 466	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EQT 469	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EQT 470	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EQT 471	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58B	< 0.01	< 0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-
EQT 472	< 0.01	< 0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EQT 475	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FUG 009	0.08	0.08	0.37	-	-	-	-	-	-	-	-	-	-	-	-
196J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RLP 020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RLP 021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RLP 022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RLP 023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RLP 024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RLP 027	< 0.001	< 0.001	0.01	-	-	-	-	-	-	-	-	-	-	-	-
60C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RLP 028	< 0.001	< 0.001	0.01	-	-	-	-	-	-	-	-	-	-	-	-
60G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RLP 029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RLP 030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER1996009

Permit Number: 373-V0

Air - Title V Regular Permit Initial

All phases

Subject Item	Ethylene glycol			Ethylene oxide			Formaldehyde			Hydrochloric acid			Naphthalene		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
EQT 312	< 0.001	< 0.001	< 0.01	0.02	0.02	0.10	0.02	0.02	0.10	0.10	0.10	0.10	0.10	0.10	0.10
60F	< 0.01	0.02	< 0.01	0.01	0.01	0.05	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01
EQT 465	< 0.01	0.02	< 0.01	0.01	0.01	0.05	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01
41A	< 0.01	0.02	< 0.01	0.01	0.01	0.05	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01
EQT 466	< 0.01	0.02	< 0.01	0.01	0.01	0.05	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01
42A	< 0.01	0.02	< 0.01	0.01	0.01	0.05	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01
EQT 469	0.29	2.47	1.29	0.38	1.28	0.65	0.38	1.28	0.65	0.38	1.28	0.65	0.38	1.28	0.65
46A															
EQT 470															
58															
EQT 471															
58B															
EQT 472															
50															
EQT 475															
60E															
FUG 009	0.52	0.52	0.26	0.17	0.17	0.76	0.17	0.17	0.76	0.17	0.17	0.76	0.17	0.17	0.76
196J															
RLP 020	0.001	0.002	< 0.01	0.01	0.01	0.26	0.01	0.01	0.26	0.01	0.01	0.26	0.01	0.01	0.26
53	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
RLP 021	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
54															
RLP 022	0.001	0.002	< 0.01	0.01	0.001	0.001	0.002	0.002	0.001	0.001	0.002	0.001	0.001	0.002	0.001
55	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
RLP 023	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
56															
RLP 024	0.001	0.002	< 0.01	0.01	0.001	0.001	0.002	0.002	0.001	0.001	0.002	0.001	0.001	0.002	0.001
57															
RLP 027															
60C															
RLP 028															
60G	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
RLP 029	< 0.001	< 0.001	< 0.001	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
60H															
RLP 030	223.85	369.05	2.57	0.12	0.20	< 0.01	0.01	0.26	0.43	< 0.01	0.01	0.26	< 0.01	0.01	0.26
2300															

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AIID: 2083 - Union Carbide Corp - St Charles Operations
 Activity Number: PER19960009
 Permit Number: 373-V0
 Air - Title V Regular Permit Initial

All phases

Subject Item	Avg lb/hr	Max lb/hr	Tons/Year
EQT 312			
60F			
EQT 465			
41A			
EQT 466			
42A			
EQT 469			
46A			
EQT 470			
58			
EQT 471			
58B			
EQT 472	0.04	0.08	0.17
50			
EQT 475			
60E			
FUG 009	< 0.001	< 0.001	< 0.01
196J			
RLP 020			
53			
RLP 021			
54			
RLP 022			
55			
RLP 023			
56			
RLP 024			
57			
RLP 027	< 0.001	< 0.001	< 0.01
60C			
RLP 028	< 0.02	< 0.02	< 0.01
60G			
RLP 029			
60H			
RLP 030	2300		

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AIID: 2083 - Union Carbide Corp - St Charles Operations

Activity Number: PER19960009

Permit Number: 373-V0

Air - Title V Regular Permit Initial

All phases

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals

Permit Parameter Totals:

1,2-Dichloroethane: 0.38 tons/yr
1,4-Dioxane: 0.01 tons/yr
Acetaldehyde: 0.23 tons/yr
Acrolein: <0.01 tons/yr
Chloroethane: 0.17 tons/yr
Ethylene glycol: 6.12 tons/yr
Ethylene oxide: 3.81 tons/yr
Formaldehyde: <0.01 tons/yr
Hydrochloric acid: 0.10 tons/yr
Naphthalene: 0.85 tons/yr
Vinyl chloride: 0.17 tons/yr

Emission Rates Notes: